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AUTHOR	Banathy, Bela H.; And Others
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ABSTRACT

Conducted at the request of the Boy Scouts of America and part of a larger project funded by the U. S. Office of Education to assess the place of career education in the total Scouting program, a study explored ways to strengthen collaboration between Scouting and schools for the purpose of improving and extending the career education programs of both agencies. The career education linkage project consisted of six stages: (1) research and analysis on the problem area of formal/nonformal educational agency linkages; (2) design of a project model; (3) development of a pilot program for middle school and high school age groups; (4) implementation over a six-week period; (5) evaluation of project outcomes; and (6) forward planning and reporting. During the design, development, and implementation stages, project staff produced three documents (all of which are published in this document): two study reports analyzing the career education content of Scouting programs and offering recommendations, and a procedural guide (entitled Career Seminar Resource Packet) for organizing and conducting career seminar programs in high schools. In general, project findings indicated that benefits can be obtained through linkage arrangements between schools and Scouting. The schools dicovered that a wealth of career-relevant information can be obtained from Scouting literature. Areas were recommended for future Scouting linkage and/or career education efforts. (HLG)

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LINKING THE PROGRAMS OF SCOUTING AND THE SCHOOLS FOR THE ADVANCEMENT OF CAREER EDUCATION

FINAL REPORT

by

Bela H. Banathy
Dru Simms Robinson
Jacqueline Haveman
Celia Chesluk
David Stein

Submitted to

SCOUTING/USA

August, 1977

This report is submitted as part of SCOUTING/USA's Career Education Program for Scouting Project, 1976-77.

INSTRUCTIONAL AND TRAINING SYSTEMS PROGRAM

FAR WEST LABORATORY
FOR EDUCATIONAL RESEARCH AND DEVELOPMENT
1855 FOLSOM STREET • SAN FRANCISCO, CALIFORNIA 94103

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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Golden Gate Scouting, Area V, SCOUTING/USA

Alameda Council, SCOUTING/USA

J. Richard Hipskind, Scout Executive, Alameda Council*
Art Kurrasch, Council President*
Betty Strupler, Office Manager
Participating Troop Leaders and Scouts.

Alameda Unified School District

G. Robert McConnell, Superintendent of Schools
Walter L. Klas, Assistant Superintendent, Educational Services*
Robert K. Meier, Coordinator, Career and Vocational Education*
Fred Kjelland, Consultant*
John Bay, Counselor and Career Education Coordinator, Encinal High School*
Bill Caver, Vice-principal, Chipman Middle School*
Joan Diamond, Teacher, Haight Elementary School*
Linda Dillon, Teacher, Otis Elementary School*
Herb Hartwig, Teacher, Longfellow Middle School*
Marlynn Kaake, Teacher, Lincoln Middle School*
Omega Lewis, Counselor, Alameda High School*
Jon Medeiros, Teacher, Encinal High School*
Norma Tees, Administrative Secretary
Jeanette Colgan, Coordinator, Encinal Career Center

Far West Laboratory Staff

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*Denotes Scout personnel, school administrators, teachers and counselors who served throughout the project on the Design Committee.

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PREFACE

This project, LINKING THE PROGRAMS OF SCOUTING AND THE SCHOOL FOR THE ADVANCEMENT OF CAREER EDUCATION, was conducted to fulfill a sub-contract with the Boy Scouts of America, and was part of their CAREER EDUCATION PROGRAM FOR SCOUTING, a project funded by the U.S. Office of Education, Office of Career Education.

The linkage project described herein was conducted by the Instructional and Training Systems Program of the Far West Laboratory for Educational Research and Development concurrently with a major project funded by the U.S. Office of Education, Office of Environmental Education. The environmental education project was also concerned with linking programs of the formal and nonformal educational sectors, but with an environmental, rather than career, education emphasis.

The extent and depth of the career education linkage project was made possible only by its position with respect to the environmental education linkage project. While information regarding program content (i.e. career education and environmental education) could not be transferred from one project to the other, information and findings pertinent to interorganizational linkage was applicable to both projects. The resulting exchange contributed significantly to the career education project, which benefitted from the base provided by the environmental education project.

This report is organized in three parts. PART ONE, REPORT ON THE PROJECT, contains two sections: Section I, Overview of the Project, presents a general approach to the project; project goals and objectives; project phases; and interactions between Far West Laboratory and members of the SCOUTING/USA national staff. Section II, A Description of the Project, presents a discussion

of the project phases of research, analysis and model design, pilot activities, and evaluation; and presents findings, analysis, interpretation, and recommendations.

PART TWO, CHARACTERISTICS OF A GENERAL MODEL AND ITS APPLICATION TO THE ALAMEDA PROJECT, presents in Section I, the general linkage model which is applicable to general linkage efforts between formal and nonformal educational agencies; and, in Section II, the application of this general model to a specific situation, as documented in the pilot program conducted between Alameda, California Schools and Scout Council. This latter section includes findings and recommendations which grew out of that pilot project, and thus provides the most specific information for the development of procedural guides which might be used to accomplish linkage programs in SCOUTING/USA in the future.

PART THREE, DOCUMENTS REPORTING ON THE CAREER EDUCATION PROGRAMS OF SCOUTING/USA, includes the following three documents: Study Report on Career Education Content in Unit Level Materials of the Cub Scouting Division of SCOUTING/USA; Study Report on Career Education Content in Unit Level Materials of the Scouting Division of SCOUTING/USA: and a Career Seminar Resource Packet (Exploring level). The first two documents were developed as a result of the application of one step specified in the linkage model, that of identifying goals and objectives of the linkage-relevant program. The Career Seminar Resource Packet is a prototype version of a procedural guide for use by Exploring Executives in conducting Career Seminars--one kind of linkage arrangement already conducted by some Exploring programs.

EXECUTIVE SUMMARY

This project LINKING THE PROGRAMS OF SCOUTING AND THE SCHOOLS FOR THE ADVANCEMENT OF CAREER EDUCATION was conducted at the request of the Boy Scouts of America (SCOUTING/USA) that a study be undertaken exploring ways to strengthen collaboration between Scouting and schools for the purpose of improving and extending the career education programs of both agencies. This effort was part of a larger project conducted by Scouts--funded by the U.S. Office of Education--to study the place of career education in the total Scouting program.

The Instructional and Training Systems (ITS) Program of Far West Laboratory (FWL), in response to the Scout request, developed the basic plan for a linkage project and served as the facilitating organization. In this role, ITS staff coordinated the interaction among the various groups. Program Director was Bela Banathy and Project Coordinator was Dru Robinson.

SCOUTING/USA was represented at the national level by members of the staff concerned with career education on the three levels: Exploring was represented by Audrey Clough; Scouting by Richard Dutcher; and Cub Scouting by Russell Williams. Project Coordinator was Ivan Stafford and, upon his retirement in late winter, the Coordinator position was assumed by Forrest McVicar.

With direction from national Scout staff members, the ITS project staff approached a Scout Council and Unified School District in Alameda, California. These two groups were invited to participate in the year-long project (September, 1976 to August, 1977) to design, develop, test, and report on a general linkage and collaboration model and on possible school/Scout linkages arrangements that might be generated through implementation of the model.

At the same time, the ITS program staff was conducting a larger linkage project with the Alameda groups, focusing on environmental education programs.

The knowledge base and general model specifications for linking formal and nonformal educational agencies were applicable to both the career and environmental education projects.

The career education linkage project was conducted in six stages. Those stages and their significant outcomes are discussed below:

During the RESEARCH AND ANALYSIS stage, project staff gathered, studied, and interpreted literature on interorganizational linkages, and related that information to the problem area of formal/nonformal educational agency linkages. Linkage information indicated that two basic requirements of any linkage model were those of coherence--which would enable the model to sustain operations--and adaptability--which would enable the model to adjust to changing requirements and demands.

The knowledge base developed during this stage contributed to model design and to project decisions throughout the year. The base was continually modified and added to as new information became available.

During the DESIGN stage, the overall specifications for the general model were produced. A study of overlapping as well as unique goals and program domains led to the consideration of alternative linkage/integration configurations. These were submitted to representatives of participating agencies for comment.

Alameda school and Scout people who were interested in the project were invited to form a Design Committee to contribute to the model design and provide ongoing professional input. The resulting group, composed of some seventeen people representing various levels in both organizations, met regularly throughout the project year. National Scout input was provided periodically by visits from representatives from the national staff. The contribution of the Design Committee throughout the project was significant.

During the DEVELOPMENT stage, project staff and Design Committee members

worked together to plan the pilot test program, including the steps necessary for implementation. While career education was viewed as being most effectively and meaningfully conducted in the context of real life, it became apparent that planning and coordination activities necessary to provide such a context required a good deal of staff time from both agencies.

It was also agreed that, to be successful, linkage arrangements between programs require a certain level of existing program development. Consequently, the linkage program which developed in Alameda focused mainly on the high school/Exploring and, secondarily, middle school/Scouting levels where both agencies already conducted career education programs. On the other hand, little was achieved on the elementary/Cub Scouting level, where because of the age group involved, career education content has low priority in both organizations.

During the IMPLEMENTATION stage, members of the Design Committee carried out the six-week pilot test program. The main program which developed was a series of events that provided a small group of students/Scouts with experiences relevant to careers in energy and land use. Entitled the Alameda Community Career Awareness (ACCAP) Project, the environmental emphasis was chosen to coordinate the career education project with its sister linkage project emphasizing environmental education. Through ACCAP, twenty-five students/Scouts took field trips, heard speakers and participated in hands-on activities designed to enable them to fulfill Merit Badge and skill award requirements, and to make contributions to school classes.

The ACCAP program was judged expensive in terms of staff time and effort, and thus provided a cautionary note that potential demands on personnel be an important consideration in thinking about a linkage plan. However, the program was judged by student/Scout participants, their parents, selected teachers, and Design Committee members as generally successful.

Also during the above three stages (Design, Development, and Implementation), project staff produced three documents that contributed to the linkage program and which now provide Scouting with information relevant to the enhancement of their emerging career education program.

Two Study Reports analyzed the career education content of the unit level materials of Cub Scouting and Scouting programs respectively, and made specific and detailed recommendations for improving the career education content through revisions and additions. The documents grew out of the finding previously indicated that successful linkage requires both organizations to have strong content-related programs.

At the Scouting level, career education content exists in many materials, notably the Merit Badge pamphlets, but there is a need to label it as such and to adopt a career education framework. Attention to the development of a Scouting career education program is especially important at the Cub Scouting level, where, as indicated earlier, career education is minimal.

The third document was developed for use on the Exploring level, where career education concepts are a basic program component. This document is a step-by-step procedural guide for use by an Exploring Executive in organizing and conducting career seminar programs in high schools--one kind of linkage activity currently in use by some Councils. This prototype Career Seminar Resource Packet was pilot-tested in the Alameda project, and revisions based on feedback from project participants were made.

The EVALUATION stage, ongoing throughout the year, provided information for decision-making in the course of the project and for judging the overall worth of the project outcomes. Information was collected by such means as questionnaires, interviews, daily logs, observations, and the Design Committee meetings where opinions, attitudes, experiences and ideas were expressed.

Throughout the project, Design Committee members were asked to play their roles in a self-conscious manner; that is, to constantly examine, record, and evaluate their actions and thoughts with respect to the linkage process in which they were involved.

The final stage of the project, FORWARD PLANNING AND REPORTING, focused on the documentation of the findings; the development of the final specifications for the general linkage model--detailing linkage costs, benefits and steps; the description of the application of the general model to the Alameda pilot test situation; the setting forth of recommendations for career education and linkage emphases in the total Scouting program; and the preparation of the final versions of the study reports and the career seminar guide. All of the above are reported on in this document.

In general, findings of the project indicate that benefits can be obtained through linkage arrangements between schools and Scouting, and that each agency can gain from and contribute to such an effort. Some linkage efforts can be built upon existing linkages between schools and Scouting--the career interest survey, for example, as conducted for high schools by many Exploring programs--and in other areas, new exchanges can be worked out.

The schools in our pilot program, for example, found that a wealth of career relevant content can be obtained through Scouting literature, notably through the Merit Badge Pamphlets, and they welcomed the use of these materials in their career centers and classrooms. This arrangement provided Scouting with potential membership contacts and, perhaps even more important, enhanced the image of Scouting as a community educational agency. Staff members of both organizations seemed to be more receptive to the other organization as a result of the interaction which occurred during the project.

Project results indicate several areas in which Scouting could continue

linkage and/or career education efforts:

- The linkage model could now be tested in other Council/school cooperative arrangements across the country. Procedural guides could be developed to facilitate those arrangements.
- A training program could be developed for Scouting personnel who are interested in working with schools. The program would offer instruction in linkage goals, strategies for attaining them and practical techniques for carrying them out; and in decision-making and problem-solving skills.
- A dissemination plan could be developed for making the model available to Scout personnel who are interested in linkage.
- A positive attitude toward linkage could be encouraged within the organization so that linkage is viewed as rewarding.
- A further commitment could be made to Scouting's career education program through a comprehensive planning and coordination effort and through the materials revisions recommended in the study reports contained herein.

PART ONE

REPORT ON THE PROJECT

The report on the project contained in this part of this document presents an overview, including the general approach to the project; project goals and objectives; project phases; and the interactions between Far West Laboratory and national staff members of SCOUTING/USA; and a description, including project phases, findings and recommendations.

SECTION I: OVERVIEW OF THE PROJECT

SECTION II: A DESCRIPTION OF THE PROJECT

PART ONE

SECTION I

OVERVIEW OF THE PROJECT

A. PROBLEM, PURPOSE AND GENERAL APPROACH

B. PROJECT GOALS AND OBJECTIVES

C. PROJECT PHASES

D. INTERACTIONS BETWEEN FAR WEST LABORATORY AND NATIONAL STAFF FROM SCOUTING/USA

SECTION I

OVERVIEW OF THE PROJECT

The problems and purpose addressed by the project and the general approach that was followed in carrying it out are described below. Project goals and objectives are stated, the relevant capabilities of participating agencies are specified and the results and benefits emerging from the cooperative effort of these agencies are identified.

A. PROBLEM, PURPOSE, AND GENERAL APPROACH

Education is more than schooling. The development of young people and the continuing development of adults is fostered by learning experiences in all facets of life. Beyond the boundaries of the school, formal and nonformal opportunities for learning emerge in the home; in peer, neighborhood, social and religious groups; through community, youth, and adult agencies; through private and public employers; through the media and in many everyday life situations.

These educational opportunities and efforts have been fragmented and separated from the school and from each other, even though research findings in the domain of interagency cooperation suggest that linkage and integration of similar efforts may generate benefits well beyond those produced by the

total sum of separate efforts. Powerful potential could be tapped by creating an alliance among sectors of the community and the society that are interested and involved in education.

1. Problem

The fundamental problem is the lack of coordination between formal and non-formal educational sectors. Effective and practical education can occur most easily when the various systems within the total educational community are closely linked, mutually reinforcing one another's efforts and optimizing dollars spent. Unfortunately, these systems are currently linked weakly if at all. Formal education is functionally separate from the nonformal educational sectors and its potential for integrating with the other educational sectors of the community is as yet undeveloped.

Career education, perhaps more than any other educational domain, requires such integration and linkage. The most effective and meaningful way to conduct career education is in the context of real life.

By definition and by philosophy, career education implies the dismantling of barriers separating formal education from nonformal educational opportunities, situations, resources and experiences. Thus, career education invites an interface, a linkage and eventually an integration of career education programs in the school with career education efforts and career development opportunities available in various sectors of society. This holistic view of career education implies the identification, organization and use of disparate career development resources regardless of where they are found.

The image of the broad-based view of education suggested above -- was clearly articulated in the various program statements of the Office of Career Education.

2. Purpose

The purpose of the project is to strengthen and improve collaboration between schools and Scouting; and to design, develop and test a model for linking and integrating career education in schools with the career development programs of Scouting.

The model is to: (a) display procedures and organizational arrangements for the linkage and integration of the career education programs in the school and Scouting; and (b) provide guidelines for the planning, implementation and evaluation of those procedures and arrangements. The model should be generic in nature and applicable to linkage in a variety of communities.

The application of the model (more specifically, the implementation of linkage and integration procedures and arrangements defined by the model) will:

- Infuse some of the career education curriculum content of the school into the programs of Scouting.
- Infuse some of the career education program content and approach of Scouting into the curriculum of the school.
- Develop cooperative and mutually supportive linked instructional planning and management arrangements in order to strengthen, enhance, extend and increase capability and effectiveness in conducting career education programs.
- Demonstrate the (use of the) model for linkage and integration and the social and educational benefits that accrue from such linkage and integration.

3. General Approach

The project was carried out in one year. During this time, the linkage and integration model was developed in conjunction with a selected local Council and educational agency, both located in Alameda, California. It was planned that during a second phase (year two) the model could be introduced in other communities with other Scout Councils and local education agencies to test its generic property and its range of applicability.

By its nature the project called for involvement of various educational agencies. Accordingly, the project was carried out through the combined efforts of a consortium of several agencies. The Far West Laboratory for Educational Research and Development was the facilitator organization. The Laboratory, a nonprofit public agency, has a major commitment to improve the quality of human life and to create better opportunities for learning. The Laboratory has developed numerous educational products and programs directed at stages of educational development ranging from and including early childhood to graduate level and professional development projects.

During recent years, The Far West Laboratory has studied linkage arrangements between formal and nonformal educational agencies that are national in scope.* Even though the project has developed a generic linkage model that is applicable to a wide variety of nonformal education sectors, the model was designed with the involvement of a specific educational agency in mind.

SCOUTING/USA was represented at the national level by members of the national staff and on the local level through the participation of the Alameda Scout Council. Characteristics of the community served by this council are discussed below.

A community of 75,000 people, Alameda is located in the San Francisco Bay Area. Alameda is served by a school district that educates approximately 10,000 students and includes two high schools (grades 9-12); one continuation school, five middle schools (grades 6-8); nine elementary schools (K-5), and one children's center. Adult education is also offered. The ethnic breakdown of the student population is as follows: White = 7,162; Asian or Pacific Islander = 1,856; Hispanic = 800; Black = 506; and Native American (including

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*Linkage between the public education program of the Civil Preparedness Agency and the Boy Scouts of America and 4-H (Banathy et al., 1975).

Alaskan natives) = 90. The presence of a large naval base in the community contributes to the special problem of a high rate of student turnover.

B. PROJECT GOALS AND OBJECTIVES

The Far West Laboratory, SCOUTING/USA, and the Alameda School district joined in a cooperative effort to advance career education by creating a model for formal linkage between the formal and nonformal education sectors. The goals and objectives of this effort are outlined below.

1. Project Goals

There were four project goals.

Goal 1: Design a linkage model and component means and methods for facilitating the linkage and integration of career education programs in schools with those of scouting.

Goal 2: Implement the linkage model and:

- infuse school career education curriculum content and approach into the programs of Scouting and;
- infuse some of the career education program content and approaches of Scouting into the school curriculum.

Goal 3: Design, develop, and validate cooperative and mutually supportive instructional management arrangements between school and Scouting career education programs and personnel in order to facilitate the attainment of Goals 1 and 2.

Goal 4: Describe the linkage model and report findings relevant to the attainment of Goals 1, 2 and 3 in order to make the model accessible to Scout Councils across the nation.

The emphasis throughout the program was on the description of strategies that would result in this report, as specified in Goal 4. It is hoped that this report will be useable and will encourage program development on the national

and local levels of SCOUTING/USA. Such programs, however, will require real organization support, including attention to career education as a valid part of Scouting's program.

2. Enabling Objectives

The goals described above were attained by accomplishing the following specific objectives:

- Analyze the overall aims, programs and organizational (institutional) characteristics of career education in schools and in SCOUTING/USA.
- Define the extent to which there is goal and program overlap and congruence in organizational and other institutional characteristics.
- Based on findings, design a generic linkage model and construct alternative configurations of that model for mutual program linkage and program integration.
- Specify program means, methods and procedures that implement linkage and program integration.
- Outline a plan for pilot implementation and testing.
- Implement and test the program linkage in pilot settings.
- Assess program impact.
- Report findings of pilot implementation.

C. PROJECT PHASES

Major stages of the Career Education Linkage Project included:

- Research and Analysis
- Design
- Development
- Implementation
- Evaluation
- Forward Planning and Reporting

The Research and Analysis stage provided the information/knowledge base needed as input for the design of the linkage/integration model. During this first stage, the knowledge base for the project and definition of goals, programs and organizational characteristics of schools and Scouting was established. Action in this task area was initiated by Far West Laboratory, with the project staff developing specifications for the information and participating organizations supplying the relevant information.

The project staff also analyzed the available data on the objectives, programs and organizational characteristics of school and Scouting career education plans in order to determine the nature and scope of goal and program overlap and to specify areas where overlap did not exist or was only marginal. Findings of the analysis were shared with participating agencies for their comments and validation.

During the Design stage, a description and an overall specification of the components of the career education linkage/integration model began. A study of overlapping as well as unique goals and program domains led to the consideration of various goals and the selection of emphases and program additions and adaptations. Based on these concerns, a set of alternative linkage/integration configurations emerged. These were then submitted to representatives of participating agencies for consideration.

The third stage, Development, identified the means and methods by which the program could be activated and linkage and integration could be implemented. First, the means, tools, resources and descriptions of the methods and procedures that were used to implement linkage and integration were acquired. An overview of SCOUTING/USA's career education program was achieved through analysis of the career education content of their materials used at the unit level. A survey of resources at the participating local education agency provided the

information that was used in considering and selecting the means, tools and resources needed to serve as potential components of a pilot program of linkage/integration. Information was also obtained by identifying critical areas where materials and resources were not available.

Next, plans and arrangements for the introduction of Pilot Testing were developed in coordination with the participating agencies. At the national level, the linkage pilot program was developed with the involvement of members of the national staff of SCOUTING/USA. At the local level, arrangements were made with representatives of participating local schools and the local Scout Council.

During the Implementation stage, linkage/integration programs were introduced in a pilot setting for a period of six weeks in order to make an initial assessment of their impact on career education programs. Component tasks of this stage included:

1. The orientation of: (a) school staff and students at participating schools; (b) community representatives; and (c) participating local Scout Councils and Scout units; and, (d) selected parents.

2. The introduction and operation of a pilot-program, limited in scope but with all the essential elements of the linkage/integration model.

The Evaluation stage, ongoing throughout the project, involved overseeing and monitoring the design, development and implementation phases, and provided information for (a) decision making in the course of the project (formative evaluation) and (b) judging the overall worth of product outcomes (summative evaluation). Design evaluation was accomplished at various levels and included youth, parents and professional representatives from the participating agencies.

The final stage, Forward Planning and Reporting, included this report covering findings, the final development of a linkage/integration model, and recommendations for further research and development efforts which could be undertaken by SCOUTING/USA.

D. INTERACTION BETWEEN FAR WEST LABORATORY AND NATIONAL STAFF OF SCOUTING/USA

Interaction occurred between Far West Laboratory (FWL) and the national level staff of SCOUTING/USA throughout all phases of the project.

Drs. Ivan Stafford, SCOUTING/USA's Associate Director of Finance Development, and Bela Banathy, Far West Laboratory's Instructional and Training Systems Program Director, met with the project monitors in the Office of Education the 28th of October, 1976. The following day, Dr. Banathy visited SCOUTING/USA headquarters and presented a seminar to key staff on linkage systems.

To further study the state of the art, Dru Robinson, FWL Project Coordinator, attended the Commissioner's Conference on Career Education in Houston, Texas, from Monday, November 8, 1976, through Wednesday, November 10, 1976. The necessity and value of linkage between formal education and community groups and agencies in fostering career education programs was emphasized. At the conference she met with national Scout staff members and Exploring executives in order to exchange information regarding national and local programs.

On January 6 and 7, 1977, Dru Robinson visited the SCOUTING/USA headquarters in New Jersey. There she met with Audrey Clough, Associate Director of Exploring; Richard Dutcher, Associate Director of Scouting; Forrest McVicar, Associate Director of Exploring; Russell Williams, Associate Director of Cub Scouting, and others. Topics discussed included: 1) the national level goals and objectives of SCOUTING/USA; 2) the production by local councils of Exploring-sponsored Career Seminars; and 3) the progress of the linkage project.

On January 26 and 27, 1977 Richard Dutcher, Associate Director of Scouting, SCOUTING/USA, visited Far West Laboratory in San Francisco and attended a Design Committee meeting in Alameda. At the Design Committee meeting, he contributed

to model development and provided input regarding national application of the model. Later, he reviewed the progress of the Design Committee to date, stressing that model developers must address themselves to the fact that Alameda is an atypical council. In addition, Mr. Dutcher examined and commented upon the career education goals and objectives extrapolated by Far West Laboratory staff from Merit Badge requirements and materials.

Audrey Clough, Associate Director of Exploring, visited Far West Laboratory on February 16 and 17. She contributed specifications for career seminar materials and presented national perspectives on linkage at the Exploring level. She met with Alameda Scout Executive Dick Hipskind and Director of Career Education for the Alameda Unified School District Robert Meier to discuss expectations for and potential contributions to the linkage effort.

On March 3, 4, and 7, Far West Laboratory staff met with Russell Williams, Associate Director of Cub Scouting, SCOUTING/USA in San Francisco. Points discussed at these meetings included: the basic thrust and structure of Cub Scouting as well as the projected Calendar of Events through August 1978; SCOUTING/USA's interest in career education and an Alabama-based project entitled Project Free Enterprise; and an agreement that Far West Laboratory would report findings from a review of selected Cub Scout literature on May 1, 1977.

PART ONE

SECTION II

A DESCRIPTION OF THE PROJECT

A. RESEARCH, ANALYSIS AND MODEL DESIGN

B. PILOT ACTIVITIES

C. EVALUATION

D. FINDINGS, ANALYSIS, AND INTERPRETATION

E. RECOMMENDATIONS

SECTION II

A DESCRIPTION OF THE PROJECT

The stages through which project goals were attained are described here.

A. RESEARCH, ANALYSIS AND MODEL DESIGN

The intention here was to establish the information/knowledge base required for designing the linkage model. An extensive literature search of relevant articles, periodicals and books yielded information that provided the basis for the selection of the generic characteristics of the linkage model and, further, for design of the model at more specific levels of application.

A report on the results of the literature survey summarized these findings according to two general categories: (1) coherence: Are the sets of operations defined clearly? Are they useful? Are they connected to each other by a logical tissue that constantly and purposefully directs them to the specified (linkage) end? and (2) adaptability: Is the model sensitive to new information and new needs? Can the structure adjust or regenerate itself without losing power or significance so that difficulties may be resolved or the appropriate ends achieved?

Within these two general categories, the literature review delineated some further requirements for successful interagency linkage at various levels of specificity. For example, the need for considering the social, political and economic contexts of the participating organizations encompasses the simplest and most obvious first step for linkage--i.e. finding past linkages that were effective.

In addition to the report on the literature survey, which served as an important source for designing the linkage model, a series of four papers (by Bela Banathy) related to alternative design methodologies for constructing linkage models and programs was distributed to linkage project staff and Design Committee

members. The Committee used information contained in the papers to guide them in the design process for their specific programs.

B. PILOT ACTIVITIES

The Alameda Unified School District and the local Scout Council of Alameda were identified as the representative agencies for the pilot program. Participating agencies were selected through the cooperation of the national staff of SCOUTING/USA (for the nonformal sector) and the district level of the Alameda School District (for the formal sector).

The Scouting participation, initiated on the national level, was arranged through the Golden Gate Scouting Consortium--an organization of Bay Area Scouting groups. The Alameda Council Scout Executive invited members of his volunteer staff to participate in the program.

In the Alameda School District, initial contact was made with the Superintendent of Schools, who then enabled the project staff members to meet with district level personnel. Those district level people (Assistant Superintendent in charge of Educational Services and the Coordinator responsible for the career education program of the district) then coordinated the selection of district schools and personnel participating in the project.

Pilot activities for this project occurred on two levels: Design Committee and program.

1. Design Committee Level

The Design Committee consisted of seventeen people representing the Alameda School District, the Scout Council and the Far West Laboratory. The tasks of

the committee included: designing the linkage, carrying out the linkage program development and implementing the linkage program.

Committee members were selected from various levels of the participating organizations. Representing the Alameda Unified School District were teachers from each school level (elementary, middle, and high school), counselors, a school vice-principal and district administrators. Substitute teacher time was paid for by the project.

The local Scout representatives included the Scout Executive and volunteers working with the divisions within Scouting. Representatives from the national Scout staff were present at several meetings.

It was recognized early that attendance at the daytime Design Committee meetings would be difficult for Scout leaders because of their work commitments. Therefore, a part-time Scout liaison worker was employed by the project to convey information and to coordinate plans between school and Scout participants.

Eight all-day Design Committee meetings, involving all members, were held. Various other meetings, involving smaller groups, were called when group members indicated a need.

During the first Design Committee meeting an Outline of Project Phases was presented. It was stressed that the events occurring in each stage would depend upon feedback from the last phase. At this first meeting, the concept of linkage was introduced. Ideas implicit in linkage, as well as potential costs and benefits, were examined. A need for cooperation, interdependence and resource sharing was established. Stated as points to examine further were:

- communications;
- community needs;

- boundary imperatives;
- personal commitments and how to develop them;
- potential inequalities and conflicts.

Many of the important components of a systems approach to education were recognized. However, goals of each of the participating organizations and how they relate to the general interest of the learner was needed.

At the second Design Committee meeting, members addressed themselves to the previously stated need for clarification of the goals of participating agencies and how these goals relate to the general interest of the learner. Each committee member in turn spoke about personal and organizational interests, needs, resources, experiences, and perceptions of linkage. Discussion again turned to linkage concepts such as further definition of linkage; the ways in which the uniqueness of an organization entails the uniqueness of organizational linkage; the facilitator and the role of boundary personnel;and the structure of the linkage system.

Those who attended the second Design Committee meeting recommended that the final product include a professional development component. It was agreed that Far West Laboratory would integrate knowledge and resources from related projects (for example: Experience-Based Career Education, a national model developed by the Laboratory). A 1976-77 school calendar, noting significant dates in the school year, was circulated to help the Design Committee plan for future meetings. The third meeting opened with a slide and sound presentation of the Far West Laboratory Experience-Based Career Education project. Information presented eased the concern of some members about making the transition from the theoretical aspects of model development to the practical aspects of program development.

Committee members then returned to the topic of personal and organizational perceptions of linkage. Both school and Scout representatives reiterated their

interest in working together and their concern over such items as insurance, sharing of information, legal considerations and supervision.

The rest of the session was largely devoted to discussion of a paper discussing design considerations relevant to institutional programs for linkage. Among the topics were: legal and fiscal constraints; clearly defining goals, objectives and linkage expectations; and the need for continuous self-evaluation (correction and adjustment) and self criticism of the functioning of the linkage. Also, the role of boundary personnel or linkage management, systematic implementation arrangements, reward systems and provisions for conflict management were broached. One point stressed in the course of a complex discussion was that linkage could be perceived as a way in which organizations can respond to the entire community and its resources.

Also, the role of the Design Committee was again clarified and representatives from the school district, the Scout Council and the Far West Laboratory discussed the allocation of role responsibilities for developing and implementing activities during the pilot phases of the program.

In an attempt to further delineate the responsibilities of the Design Committee, a memorandum was distributed to Design Committee members before the fourth meeting stating that the meeting's purpose would be "to gather ideas and make some choices for the instructional arrangements--and the resources needed to carry them out--for a joint Alameda Schools/SCOUTING pilot program in career education." For the purpose of planning, Design Committee members were asked to think in terms of the following interrelated levels:

- High schools and Explorer Scouting
- Middle schools and Scouting
- Elementary schools and Cub Scouting

Far West Laboratory presented a number of idea papers at this meeting,

including one paper that dealt with establishing ethical and aesthetic objectives for career education on the elementary, junior, and senior high school levels.

Next, several topics were discussed. One of the major issues agreed upon was the importance of awareness, as a first step, on both teacher and student levels. Teachers, it was concluded, would need to be made aware of the value of the Scout program. Strategies suggested to accomplish this included offering teachers a class, workshop or in-service training to explain how the Scout program can coordinate with the school program; emphasizing the benefits of the Scouting program during teacher orientation sessions; and disseminating an informational packet. It was pointed out that if students gathered material for such an informational packet, their awareness of the advantages of participating in a Scout program would increase as well. It was also recognized, however, that some students might hesitate to openly support such a program because of peer pressure. Another suggested strategy that would increase awareness on both levels was that of presenting the Scout program at a school assembly.

Discussion then turned to the important advantages that would accrue to organizations participating in the project. Representatives from the public school system perceived the linkage project as an opportunity to receive excellent materials (i.e., Merit Badge Pamphlets) for use in the classroom. Also, the school/Scout linkage was perceived as a way of individualizing instruction. Scout representatives looked forward to sharing this material with the school for several reasons. First, they evidenced the hope that the barrier of exclusivity that has surrounded Scouting would diminish, and second, they saw the school system functioning as a disseminator of Scout information. It became apparent, then, that representatives of both groups would be pleased to see Scout materials used in career centers as well as in classrooms. The possibility of Scout activities qualifying students/Scouts for school credit was also discussed, as was the possibility of greater parent participation in both

school and Scout programs.

During the fifth meeting, Design Committee members continued the program level development begun the week before. Various documents related to career education were used to focus attention on goals. Members of the Design Committee compiled the following list:

Career Education

Goals:

Career Awareness

Self Awareness

Appreciations and Attitudes

Decision Making Skills

Economic Awareness

Skill Awareness, Beginning Competence

Employability Skills

Educational Awareness

Linkage Possibilities:

Cross Tutoring/Training

Sharing of Materials

Scout Credit for School Activities

School Credit for Scout Activities

Collective Projects

Community Relations/Recruitment

Sharing of Joint Projects with Wider Community via Scout/School Connections

Capitalize on Scout Mobility

Teacher/Scout Leader Liaison

Objectives:

Awareness of Careers of Family and Friends

Perception of Careers as Clusters

Familiarity with Tools and How to Use Them

Students Able to Take Responsibility for Selves

Students Given Realistic Expectations

Activities:

Career Fairs

Guest Speakers

Field Trips

Career Possibilities Identified in Community Jobs (i.e., in Energy and Land Use)

At the sixth meeting, Design Committee members were asked to think about an overall evaluation plan. Far West Laboratory representatives indicated that evaluation would be conducted on both Design Committee and program levels. To guide the Committee's assessment of the Overall Evaluation Plan, Far West Laboratory suggested the following categories:

Comprehensiveness:

- What additional information should be sought?
- What additional sources of information should be used?
- Are there additional times when information should be gathered?
- Are there additional methods of gathering information that should be used?

Feasibility:

- Are there too many evaluation requirements for the Design Committee?
- Are sources appropriate for information sought?
- Will the presence of observers interfere with school/Scout program procedures?

Usefulness:

- To what extent will timing and type of information sought be useful in model and program design?
- What is the anticipated usefulness of impact evaluation for improving the program?

Validity:

- What are the methods and means for gathering information likely to produce meaningful, significant information?

Recommendations:

- What are the recommendations for revisions in the evaluation plan?

Meeting participants also discussed the approximate date of the pilot test. It was confirmed that the best time would be March-April and that the test would run six weeks. In anticipation of this, teachers were asked to request the necessary materials, which Far West Laboratory would purchase with project funds, in early February. The Committee then continued program development efforts.

Before the seventh meeting, Committee members were notified that two representatives of the SCOUTING/USA National Staff would attend. Also, Far West Laboratory suggested that major efforts be concentrated in the following areas:

(1) Evaluation Plan

- Complete selected evaluation materials, answering questions about the process used to plan the pilot program; and,
- Consider ideas for the evaluation of the pilot program itself.

(2) Goals and Objectives

- Look at the goals and objectives of Scouting and the public schools in career education to determine overlap, and application to the pilot program.

(3) Pilot Program Planning

- Continue planning with special attention to feasibility and public relations.

National level representatives from SCOUTING/USA were introduced; the Committee members were brought up to date on the activities of the Scout liaison

member;and the possibility of producing an audio-visual presentation on the linkage process was discussed. At this meeting, committee members finished program level development and received evaluation instruments.

Representatives of participating agencies in the Design Committee meetings were not only largely responsible for the design of the linkage process and of the pilot program, but also accomplished several important steps in developing the linkage model.

First, Far West Laboratory utilized these meetings as a base from which to introduce and disseminate information on the concept of linkage itself. Second, tentative but significant personal contact between boundary personnel was established. Third, information was shared between the Scout Council and the Alameda School District regarding available and potential means, tools and resources that could be components of a pilot program of linkage/integration. Fourth, specific interest areas and program plans were developed.

A major part of Design Committee effort was devoted to the development and construction of the pilot program. This involved the consideration of various means, tools, resources, methods and procedures. It also involved the identification of critical means, tools and materials not yet available. Plans for the introduction of pilot testing were put into final form and specific arrangements for the implementation of those plans were made.

The Scout liaison member of the Design Committee made contact with Scout leaders at several Scouting events. Response was positive and necessary arrangements were made for coordinating interaction between these Scout leaders and school personnel.

Publicity for the program was secured through the local newspaper and through such service organizations as the Rotary Club. Interest on the part of teachers, students, parents, Scout volunteers and Scouts was thus generated.

The collaborative strategy that evolved was entitled "The Alameda Community Career Awareness Project" (ACCAP).

The ACCAP program concentrated upon careers in energy and land use and included relevant field trips and speakers. It was decided that the student participants would be selected through the Alameda Scout Council and, for purposes of the pilot program, would be limited to twenty-five students at the middle and high school levels. Scoutmasters were informed of the program and Scouts were invited to participate. By involving themselves in the program, Scouts could earn partial completion and completion certificates for badges and skill awards.

Tasks related to implementing the pilot program included:

- clearing all plans with local school administrators (district level personnel and principals);
- sending letters to parents of selectees before the start of the program;
- checking insurance coverage with the Scouts;
- selecting agencies and speakers for field trip visits and making school presentations (agencies considered included The Bay Model, a Marine Ecology Research Facility, the local power company, a nuclear power plant or nuclear-powered ship, a solar-energy demonstration house, and a National Audubon Wildlife Study Area);
- arranging an orientation meeting for participating students and their parents;
- conducting a study of the Scouting requirements to determine exactly what participants could gain from the pilot program that could contribute to their advancement in Scouting;
- arranging transportation.

School and Scout personnel worked together to handle the arrangements of the pilot program plan. The overall coordination for the program was handled by a high school counselor, who was in charge of the Career Education Center in his school. In that position, he supervised a new paraprofessional who

was responsible for daily operation of the Center. As part of her training process, the paraprofessional assisted in the coordination of the ACCAP plans.

Both organizations planned to contribute resources. For example, Scouts had an excellent insurance program that covered the students on field trips as well as experience in organizing teams of parents to provide transportation. Thus, they were responsible for those aspects of the program. The school, on the other hand, provided such facilities as the above-mentioned Career Center for the Orientation Meeting; and such staff as the paraprofessional in charge of the Center.

Since the last week of the pilot program coincided with Public Schools Week in Alameda, the pilot program was featured in a display in the high school Career Education Center.

In summary, the major linkage activities included:

- Use of school and Scout facilities and resources to plan and conduct a career education program. The exemplary program that developed was entitled the Alameda Community Career Awareness Project (ACCAP). This year's program had an environmental emphasis and involved twenty-eight students/Scouts representing seven schools in the Alameda Unified School District, and the Alameda Council of SCOUTING/USA. The project provided students/Scouts with a series of events exploring environmental careers through speakers, field trips, and experiential activities.

- Use of Scouting literature--especially Merit Badge pamphlets--in the Career Centers at both Alameda and Encinal high schools and in selected classrooms (of Design Committee members) at all three levels (high school, middle school and elementary school).

- Use of Scouting's insurance plan to cover students involved in joint school/Scout career education activities.

- Use of the Career Center at Encinal High School to display Scout posters and literature, especially during Public Schools Week.

- Scouts who had participated in the linkage programs made classroom presentations in other classes as well as in their own classes.

In addition to the ACCAP program, one teacher also conducted a classroom-based program focusing on, but not limited to, careers in environmental education. School/Scout linkage activities in this program included:

- Use of Scouting's personal growth agreement in the classroom; and
- Use of a JOB-O career-interest survey to match career selections with interests of students and Scouts.

Goals for this career education program were:

- Through use of JOB-O and a computer program, students would learn about careers for which they are suited.
- Students would have an increased awareness of:
  1) career possibilities;
  2) career requirements;
  3) career availability in the future; and specifically,
  4) career opportunities in conservation.
- Students would explore a specific career and report their findings to the class.

Various materials were used. Activities included matching job titles with duties performed and searching the classified section of newspapers for a variety of job types, (e.g., day vs. night, standing vs. sitting, indoor vs. outdoor.)

The major linkage activity involved three student/Scouts who, after learning about and taking the JOB-O in class, administered it to their fellow Scouts at a troop meeting.

Merit Badge pamphlets were used in classrooms of other Design Committee members and, while they were not necessarily specified as career education materials, they provided career-related content for those classrooms.

C. EVALUATION

The evaluation of a linkage project can be viewed on four levels: learner, instructional, institutional and societal. While the scope of this six-week project precluded a meaningful evaluation on the societal level, evaluation on the learner, instructional and institutional levels was possible. Within this context, evaluation was both formative and summative. Since the purpose of this evaluation was to examine processes as well as products, a need was recognized in the overall evaluation plan for evaluation of both design and impact, and instruments were developed addressing these needs.

During the design phase, Design Committee members were asked to provide Far West Laboratory with feedback in two major ways. First, a questionnaire entitled: "Critique of the Design Committee Process" was distributed to all members. This questionnaire required respondents to consider the usefulness, deficiencies and strengths of the process used in formulating the design of a linkage model and program. Second, the Design Committee meetings themselves were a forum where opinions, attitudes, experiences and ideas were shared and discussed. Committee members understood that they were to play their roles in a self-conscious manner: that is, members were encouraged to verbally examine and criticize their own roles as participants in the committee.

Additional feedback on the Design Committee process was provided by a Far West Laboratory observer/participant, who attended all meetings and documented and suggested direction for the proceedings.

Other evaluation strategies employed during the design phase of program development included additional questionnaires and group discussions. A form entitled: "Questionnaire for Design Committee During Development of School/

Linkage Program" was distributed to all members. This questionnaire asked respondents to report and discuss already-existing school/Scout linkage arrangements and desirable improvements, to rate the extent to which various possible types and degrees of linkage were desired, to list perceived benefits and costs, and to discuss the perceived feasibility of various linkages.

Near the completion of the Committee's program design work, group discussion and a questionnaire aimed at administrators focused attention on anticipated cost-effectiveness, problems within and feasibility of programs, and the extent to which resources and components of school and Scout programs were expected to be utilized.

At an orientation meeting, Design Committee representatives presented the Alameda Community Career Awareness Project program to interested Scouts and their parents. At the end of the meeting, questionnaires were distributed to Scouts and parents to determine their reactions to the presentation. These questionnaires elicited information regarding attitudes toward the program, previous learning experiences and current awareness of career education.

In order to monitor the ACCAP program, the linkage project coordinator interviewed teachers, counselors and administrators in the field during the pilot-test phase. The purpose of these interviews was threefold. First, the interview was structured to provide a working description of the program. Second, it provided information concerning participants' attitudes toward the organizations involved. Third, the questions served a trouble-shooting function.

The last ACCAP activity was a presentation on careers in regional parks, given by a Park Manager and coordinated for the schools by the Scout Council Executive. In conjunction with that event, a Career Seminar Resource Packet was developed by Far West Laboratory and tested by the Scout Council Executive. A copy of this packet is included in this report. The packet gave guidelines for presenting

an outside speaker. An evaluation form, asking for comments on the quality and utility of the packet, was then distributed to the user and to others involved.

Finally, at the last Design Committee meeting held after the pilot program had come to a close, an "Evaluation of the Pilot Program" form was distributed to Design Committee members. This instrument was designed to elicit attitudes toward the linkage program, improvements in linkage and curricula, costs/benefits of linkage, degree of attainment of linkage desired, changes in perceptions of the organizations involved, degree of receptivity to change, desire to continue/expand linkage, and the usefulness of procedural guides.

The significance of the pilot test to the overall progress of linkage is necessarily limited in scope. As stated earlier, a six-week pilot test of this sort cannot hope to affect linkage significantly on all levels: societal, institutional, instructional and learner. Time, then, was a severe limitation.

Another problem was insufficient involvement of personnel from all levels of the organizations. For example, unit leaders from the Scout Council and school principals from the school district were two groups which should have been consulted with and informed about the project more than they were. Their input would have been especially valuable in development and evaluation stages.

A frequently discussed topic at Design Committee meetings was the importance of motivation for linkage. In the case of the pilot test, impetus for linkage did not originate within either of the linking organizations. Instead, it was imposed upon the organizations involved. This caused Design Committee members and program leaders to state that the linkage aspects of their programs were sometimes forced. An actual interorganizational linkage would not have this problem, since the decision to link would be an internal one.

Finally, the part played by Far West Laboratory was more than that of a

disinterested third party. Far West Laboratory performed tasks and provided services that were relevant to, but beyond, the usual duties of a facilitator.

D. FINDINGS, ANALYSIS AND INTERPRETATION

This section is divided into (1) Design, and (2) Impact phases.

1. Design Phase

Findings, analysis and interpretation of the Design Phase are based upon responses to three instruments: a) Critique of the Design Committee Process, b) Questionnaire for Design Committee During Development of School/Scout Linkage Program; and c) Questions for Administrators.

a) Response to: Critique of the Design Committee Process

Representatives of SCOUTING/USA and the Alameda Unified School District had some difficulty working within the Design Committee context. While Design Committee members protested against meetings devoted to discussion of the linkage model, they also complained of "not enough direction"with regard to the goals of the project. This contradictory message suggests that although Far West Laboratory presented enough material, it nevertheless was not fully successful in communicating the relevant information to Design Committee members. The participants were largely uncomfortable working in a relatively open-ended situation. Some would have preferred to have been told what was required, rather than to face the number of options that Far West Laboratory offered.

There was also criticism of the meetings themselves. First, it was stated that they should have been spaced farther apart. Second, they should have been more informal. Third, Scout unit leaders should have taken an active role early in the project development phase. Criticism of both the method of selection of Design Committee members and the lack of formal provision for administrative approval/participation at the individual schools was also voiced.

Finally, several Design Committee members were uncomfortable about being asked to carry on design and evaluation activities. Some expressed their belief that it was Far West Laboratory's responsibility to design the linkage programs and evaluate the design committee process, presumably without the requested input.

The most helpful aspects of the Design Committee process included exchanging ideas and information, meeting at one another's places of business and becoming more familiar with one another's interests and perspectives. When asked whether or not the Design Committee process was helpful and whether or not it would be helpful to others, the majority responded that it was and would be very helpful and useful.

b) Response to: Questionnaire for Design Committee During Development of School/Scout Linkage Program

A majority of Design Committee members indicated no previous experience with linkage. Once introduced to the idea, however, most agreed it would be either "desirable" or "very desirable" to establish institutional linkage arrangements. Specific linkage arrangements that participants said would be most beneficial included linkages between school personnel

themselves, between school and Scout personnel, and between schools and other community agencies. It was hoped that linkage would foster such activities as cross tutoring, exchange of information and materials, mutual recognition, and joint projects.

Committee members also mentioned some factors that inhibit the desirability of linkage, including costs in terms of time (working beyond normal business hours) and money. Also, it was stated that those not interested in contributing to the linkage effort (and therefore not reaping the benefits) might resent those that do. The Design Committee members indicated that other problems that should be considered during the design and implementation of linkage included: scheduling, (initial) loss of efficiency and the need, in many cases, for major attitudinal changes.

As previously stated, Design Committee members recorded more statements in favor of linkage than against it. The major reasons expressed for trying to establish and/or expand school/Scout linkages were:

- to reduce fragmentation and increase students' sense of belonging;
- to utilize previously untapped resources;
- to effect greater learning and peer group socialization;
- to create wider interest and respect for Scouting;
- to improve the quality of school and Scout programs;
- to minimize duplication of human and physical resources, thereby raising quality while lowering cost; and
- to create more learning options for students.

c) Response to: Questions for Administrators

During the design phase, administrator (i.e. school administrators and the Scout Executive) members of the Design Committee held the opinion that the program being planned would adequately cover the kind and extent of school/Scout linkages each felt to be most important. However, they expressed the wish that teachers and students receive more direct encouragement to participate in Scouting.

The administrators were split on the question of whether or not full use of existing resources was accomplished in the program design. One suggestion for increasing efficiency was to have Scout/student participation in planning. The "need for a local project manager to assist participants in planning activities and also to monitor the degree of achievement of each activity" was also stated.

Administrators agreed that the program would probably be carried out "completely as specified" or "almost completely as specified" in the program design. However, they anticipated that those implementing the program might face problems in communicating the objectives of the program to non-Design Committee participants; in arranging transportation and released time for school personnel; and in scheduling of field trips and activities. Suggestions for strategies that might effectively deal with these difficulties included publishing and sharing plans with all interested parties (especially school principals not involved in initial planning) and careful planning and coordination among schools, Scouts, troop leaders and parents.

One suggestion for improving the cost-effectiveness of the program was to explore alternatives to proposed field trips ("What exists locally that might achieve the same objective?"). A second suggestion involved establishing the position of an on-site coordinator at each agency office since it was pointed out that it was unrealistic to assume that staff would be available in each agency to coordinate and execute linkage-related tasks.

2. Impact Phase

Findings, analysis and interpretation of the Impact Phase of the ACCAP project were based upon responses to three categories of instruments: a) the ACCAP Questionnaires for Scouts, Parents, and Teachers; b) the Career Seminar Resource Packet Evaluation ; and c) the Design Committee Evaluation of Pilot Program.

a) ACCAP Questionnaires for Scouts, Parents, and Teachers

Response to the parent and Scout questionnaires distributed at the ACCAP orientation meeting was positive, warm and enthusiastic. There was some constructive criticism (e.g. "talk louder" and "Let some Scouts do speeches and stuff," and "Get the word to Scoutmasters and boys as soon as possible"), but the majority reported the meeting as having been well-run and informative.

Students were somewhat more cautious than parents, but again most people (fourteen out of twenty-seven and eighteen out of twenty-seven for Scouts and eighteen out of twenty-nine, and twenty-one out of

twenty-nine for parents, respectively) said that they thought participation in the project was "very important" and that participating Scouts would enjoy the events "very much."

Everyone who returned questionnaires decided to participate in the project. Twenty-four parents out of twenty-nine and twenty-four Scouts out of twenty-seven said that the idea of schools and agencies such as Scouts working together on such special projects as this one was a "very good idea."

Questionnaires were again distributed at the conclusion of the ACCAP experience. This time, Scouts, parents and one classroom teacher of each Scout were asked to respond.

Of twenty-eight participating Scouts, twenty-four responded. The majority stated they had learned from and enjoyed each of the ACCAP events. In fact, twenty Scouts reported that they thought the program was either fairly or very important to them personally. Four stated the program was of average importance, and none stated it was either not very important or not important at all.

Fifteen Scouts said they enjoyed the ACCAP activities "very much." Five enjoyed them "quite a bit" and four said they were "O.K." Asked whether "the schools and Scouts should continue to work together on projects such as this one," seventeen replied: "It's a very good

idea." Five said the idea was fair, and two said the idea was average. Again, no one stated the idea was either not very good or very poor.

In addition, Scouts were asked if they had applied what they learned in ACCAP to Scouting activities. Ten Scouts replied they had not, while eight said they already had, and three said they intended to. Three of the twenty-four did not answer the question. Asked if they had used information learned at ACCAP activities in schoolwork, twelve replied that they had not, six said they had, two said they intended to, and four did not answer the question.

Additional comments included suggestions for further ACCAP activities. Some thought "it would be more helpful to work on only one Merit Badge rather than parts of three." Other comments included such statements as: "We should continue it"; "It was fun and I learned a lot"; and "I would like to be in another one."

Seven parents returned post-ACCAP questionnaires to Far West Laboratory. Of these people, some had more than one child participating in the program. Asked to comment upon "What did you (or your son) think of the event? What do you think he learned? What problems, if any, did you or he have? What did he seem to especially like? What else should we know about his reaction to the event?", four respondents were able to list specific items their children had learned (or learned about), one parent did not respond, and the other two responses were generally favorable, but not specific.

Two parents stated that they considered the program "very important" for their sons; four said it was "fairly important"; and one said it was of "average importance." Four parents stated that their sons enjoyed the events "very much"; two said "quite a bit"; and one said it was "O.K." Asked whether schools and Scouts "should continue to work together on special projects such as this one," five said it was "a very good idea" and two said "it's a fairly good idea." Generally, parents were pleased with the program. One parent, however, voiced concern that students "might miss too much school." Another parent suggested that Merit Badge requirements be completed by the boys as a group.

Finally, participating students were asked to give an ACCAP "Teacher Questionnaire" to one of their teachers. Six of these questionnaires were returned by teachers to Far West Laboratory. One teacher voiced reservations concerning the effect of the program on attitudes toward school. Others stated that missed schoolwork was not made up. Two of the six teachers were unaware of the program until they received the questionnaire and none of the teachers reported a carry-over of what students learned on ACCAP outings into the classroom.

b) Evaluation: Career Seminar Resource Packet

The "Career Seminar Resource Packet" was compiled from several SCOUTING/USA sources. It was intended to serve as a model guide for a Scout Executive about to conduct a Career Seminar. This prototype model was distributed to and comments were solicited from six people: two Scout representatives, two school counselors, one school administrator, and one para-professional in charge of a high school career center.

Response to the packet was generally favorable. Although half the respondents said that they had no previous experience or knowledge of Career Seminars, all said that reading the packet gave them a clear notion of what a Career Seminar is. All agreed that the packet would be a useful tool in organizing a seminar. Of the two Scout representatives who used the packet, one rated all of the information as useful and the other rated most of the information as useful. All respondents were asked which aspects of the packet were most useful. Responses included:

- entire packet;
- Appendix A (Package for Resource People);
- Appendix C (Feedback); and
- the section outlining the four activity phases of groundwork.

The Scout representatives who implemented the Career Seminar had two specific recommendations for additions to the packet. First, they suggested that the packet should state a need for resource, school and Scout people to meet and plan the details of the Career Seminar together. The second suggestion was that seminar leaders should be advised to consider the size, as well as the age, of the audience.

Although the "Career Seminar Resource Packet" was originally conceived as a Scout Executive's aid, those who evaluated it agreed that it would be useful to school personnel or to other organizations interested in working with schools.

It was generally agreed that producing a Career Seminar was a complicated process. It involved preparation and follow-up activities as well as

requiring representatives of three separate organizations to join in an effort, the benefits of which might not be immediately evident. Nevertheless, response to the Career Seminar idea, as well as to the Career Seminar Resource Packet, was enthusiastic.

c) Design Committee Evaluation of Pilot Program

The Design Committee provided summative evaluation of the pilot project at the last Design Committee meeting, where an instrument entitled: "Evaluation of the Pilot Program" was distributed. Among other things, this instrument was designed to elicit attitudes toward the linkage program and suggestions for improvements in linkage and curricula; to determine the costs/benefits of linkage and ascertain the usefulness of procedural guides. Thirteen Design Committee members were asked to respond to this questionnaire. Nine people reported a greater appreciation of the application and value of linkage arrangements while four replied that their basic attitude had not changed over the course of the year.

Responding to a question concerning improvements related to the pilot program, six people said that the curriculum had improved because of the school/Scout linkage program. Other respondents cited increased understanding, cooperation and/or communication between the Scout and school staffs regarding their educational goals and objectives. Material sharing procedures and development of activities designed to serve common objectives also benefited from the program.

Asked to respond to the question, "What have been the major costs

of this pilot linkage program?", six people said that money for classroom substitutes during the Design Committee meetings was probably the major cost. Other costs mentioned included additional time/responsibility for staff, feelings of failure due to inadequate linkage arrangements, and money for purchase of such materials as the Merit Badge pamphlets.

The list of major benefits was long. Generally, responses included the following categories:

- increased awareness of one's own and other agencies as resources;
- increased awareness of common goals among agencies;
- increased awareness of the outside world in the classroom;
- increased student interest in school and Scout programs;
- opportunities for sharing and leadership experiences for all participants;
- the introduction of new materials/curricula; and
- the refocusing and integration of an individual's formal and non-formal education.

Design Committee members were also asked whether or not the hoped-for degree of linkage had been achieved. Two respondents said that the degree of linkage attained coincided with their expectations for the project. Two others stated that the degree of linkage attained somewhat, but not entirely, met their expectations. Of the five respondents registering disappointment in the degree of linkage attained, three said that their major disappointment stemmed from a lack of involvement and participation on the part of Scout unit leaders.

Asked what changes in perception of both their own and other organizations occurred, six respondents registered confirmation of or no change in perceptions. Others reported increased awareness and appreciation of either Scouting or of the possibilities and difficulties involved in establishing linkage arrangements.

Only one of the Design Committee members said that continuation of linkage was undesirable ("not enough time is given to learning... reading, writing and math"). All other respondents not only wanted linkage to continue, but also offered suggestions for expansion. The most common suggestion was to increase the number of participants and participating agencies. Other suggestions included:

- creation of an Advisory Committee composed of representatives of organizations that are potential community linkages;
- expansion to other career clusters;
- provision for early long-range planning; and
- expansion of linkage to include those Schools/Scout units that are willing to work together.

Finally, Design Committee members were asked if procedural guides could have been helpful to them, and what kinds of information such guides might contain. Six respondents said they were satisfied with the direction and guidelines offered in the project. One felt that procedural guides would have been an inhibiting influence. One respondent said that procedural guides "would help but...inservice training of participants would be better." Five respondents felt that procedural guides could function to introduce and involve participants in the linkage process. Specific suggestions for guide subjects included:

- how to establish linkage;
- what to expect from linkage;
- how to call a meeting for all leaders and interested teachers in a school;
- how to organize and run an intra-organizational meeting to determine if linkage is desirable and feasible;
- how to organize and run an inter-organizational meeting to establish mutual interest in linkage; and
- how to disseminate information on participating organizations and on linkage itself.

Summary of Findings, Analysis and Interpretation

Findings, analysis and interpretation of the Design Phase are based upon responses to three instruments: a) Critique of the Design Committee process; b) Questionnaire for the Design Committee During Development of School/Scout Linkage Program; and c) Questions for Administrators.

In the Critique, Design Committee members made specific suggestions concerning Design Committee functions. The majority stated that the process worked well for them and said it would be helpful/useful to others.

In responding to the Questionnaire, most Design Committee members reported no previous experience with linkage. Enthusiasm was nevertheless high, and Design Committee members suggested specific linkage arrangements they perceived as beneficial. Costs of linkage were also indicated.

Administrator members (i.e. school administrators or Scout executives) of the Design Committee received an additional questionnaire. The consensus expressed was that the planned linkage program would be a significant one. However, specific suggestions for increasing efficiency were presented. Several implementation problems were anticipated and strategies for coping with these difficulties were also suggested.

Findings, analysis and interpretation of the impact phase of the project were based upon responses to: a) the ACCAP Questionnaire for Scouts, Parents and Teachers; b) the Career Seminar Resource Packet Evaluation; and c) the Design Committee Evaluation of the Pilot Program.

Response from Scouts and parents to the ACCAP pre-questionnaire was favorable. Both interest and enthusiasm for the linkage program were high. At the conclusion of the ACCAP program, Scouts and parents were again queried. It was found that a high level of interest and enthusiasm had been maintained. Classroom teachers not previously directly involved with the linkage project were less enthusiastic, and their response alerted the developers to the importance of introducing linkage in a wide context early in the development stage.

The Career Seminar Resource Packet was also evaluated. Response to this prototype model was favorable. Respondents said they received a clear notion of how to produce a Career Seminar. Those using the packet found it very helpful. Recommendations for additions to instructions and for wider dissemination were also registered.

Finally, Design Committee members were asked to evaluate the pilot linkage program. A majority of respondents reported gaining a greater appreciation of the application and value of linkage arrangements in general. Costs and benefits to Scouting and to the schools, and the degrees of linkage achieved were discussed. Respondents also reported gaining increased awareness and appreciation of both their own and the other organization. The majority of committee members were strongly in favor of continuing the linkage and offered suggestions pertinent to future linkage efforts.

E. RECOMMENDATIONS

An interpretation of research findings and an assessment of the pilot program outcomes and model design has led to a set of recommendations for future projects to explore linkage areas between the schools and SCOUTING/USA.

These recommendations fall into five general categories:

1. Field Testing of the Model;
2. Design and Development of a Training Program for Boundary Personnel;
3. Design and Development of a Plan for Scout Dissemination of the Linkage Models;
4. Emphasis on Linkage Attitudes Within the Organization; and
5. Development of Content Relevant to Career Education Programs.

1. Field Testing of the Model

The linkage model contained here should be viewed as an initial research model which can guide development of a set of procedural guides. The model reflects the information contained in the knowledge base and includes revisions based on the pilot test data. As a continuation of the effort to effect linkage between the career education programs of Scouting and the schools, an extensive field test of the model should be conducted. The resulting adaptation of the model should be applicable to a variety of settings in Scouting programs across the nation.

Further study should be conducted to expand the existing knowledge base, which could then be used to adapt the linkage and coordination model designed in the current project. Sub-objectives would include: (a) updating and analyzing research findings concerning interorganizational coordination; (b) collecting and organizing additional information about the goals, programs, and characteristics

of the content area (career education) of schools and Scouting; (c) further determining their compatibility in matters concerning career education; (d) developing working hypotheses; and (e) testing the hypotheses.

It might then be necessary to design variations of the linkage coordination model so that alternative linkage and coordination configurations could be considered and the most promising ones selected for adaptation within the context of local Councils and/or Districts.

The third step would be to develop or acquire the ways by which to activate the program and to implement linkage and coordination. Once the means of program implementation have been acquired, methods and procedures for their use would have to be described. At that point, an extended field test program could be constructed, including plans for the introduction of the program and for its evaluation.

It is recommended that the field test linkage/coordination models be introduced into the setting of the participating organizations for a period of four to five months. The program would then be described and documented, and the model revised accordingly. At that point, dissemination of the model within the organization might be considered.

The adaptation of the general linkage model will involve the following operations:

- Define organizational goals, programs and structural characteristics of the agencies participating in the linkage.
- Determine goal, program, organizational overlap and compatibility.
- Consider alternative linkage/integration configurations, and select most promising configuration(s).
- Design individual linkage coordination arrangements as adaptations of the general model.
- Develpp implementation plan and make arrangements for implementation.
- Implement, test, and assess program impact and make adjustments.
- Report findings.

2. Design and Development of a Training Program for Boundary Personnel

The analysis and interpretation of the pilot test findings clearly indicate that the planning, implementation and evaluation of linkage efforts require that personnel representing the linking organizations be trained in linkage procedures. The design and development of a training program should be accomplished prior to the field testing of the model so that the training program could be pilot-tested concurrently.

A training program for linkage system personnel should aim to facilitate the development of competence in linking and coordinating educational programs between Scouting and the schools. The steps necessary to the accomplishment of this training program are similar to the ones described above for adaptation of the model: first, additional research and analysis should be conducted in order to establish a knowledge base relevant to the design of the program; second, alternative designs for the program should be developed, the most promising selected, and a training guide prepared; third, specific training materials should be developed, along with plans for testing them and arrangements for introducing the program; and fourth, the training program should be implemented and evaluated and the findings documented and reported.

The resulting training program for linkage personnel would then be ready for field testing on a national basis. It should be emphasized that the training program focus would be on the experiential rather than the study mode. Since linkage requires real skills, the training program would focus on problem exposure within the functional context of Scouting and schools. Both pre- and in-service programs should be considered valuable.

Training Requirements for Linkage Personnel: A most important quality of a systematically-designed and developed linkage is that it be self-generating and adaptive. To maintain this independent adaptive quality, linkage personnel may need competences beyond those of most organization managers.

These competences were identified from the literature of interorganizational linkages, and are implied in the general linkage model. However, to provide the linkage personnel with the characteristics that will insure adaptability, a training system is required.

Linkage personnel need to know linkage goals, strategies for attaining those goals and practical techniques for carrying out the strategies. Moreover, linkage personnel must know decision-making and problem-solving techniques that will keep the linkage adaptive and fruitful.

A linkage training program would address these areas:

Conflict and Problem-Solving: The coordinator's role includes the awareness of the values, as well as the dangers, of conflict and the skills needed to handle conflict. The coordinator must have the knowledge and skill to foresee problems and to bring to bear resources of the linked organizations to solve or channel problems.

Negotiation and Transformation Skills: The linkage arrangement must be open to internal and external potentialities. Even after the initial negotiation is completed, new situations that demand new negotiations may arise. Values, goals, and structures are going to be questioned, examined and re-oriented by the linkage arrangement and by the linkage coordinator. Negotiation competences are, therefore, important to the coordinator.

Systems Theory and Practice: Many of the qualities of linkage arrangements are derived from the qualities of systems in general. Thus, the coordinator would be helped by knowing analytical and synthetical skills inherent in the systems approach to unify separate or fragmented organizational efforts.

Evaluation: The coordinator's responsibilities include judging objectively the effectiveness and desirability of the linkage. The coordinator must know when and how to alter direction, decide on a different strategy or on a different goal and integrate such decisions into the linkage.

3. Design and Development of a Plan for Scout Dissemination of the Linkage Models

A common and difficult problem for new project efforts is to inform others in the organization of the findings and products. Once the value of linkage between schools and Scouting has been established, interested individuals within Scouting must be enlisted--those who are highly motivated to accomplish linkage. The question then becomes how to reach those individuals within the organization who are interested in the linkage model, and in developing procedural guides and or training programs for linkage personnel.

An intensive effort should be made to answer this question and to provide access to the model on a national basis. Products that would become a part of this information effort might include: (a) a description of models; (b) a description of the research, development and implementation activities; (c) evaluation manuals; (d) reports on field test findings; (e) procedural guides to accompany linkage models; (f) a description of the training program; (g) procedural guides to accompany the training program; and (h) an update of the literature review.

Information dissemination might be accomplished in the following ways:

- Distribution of a newsletter reporting activities, results and participants in successful linkage programs.
- The design and dissemination of a brochure giving career education linkage ideas to content-related personnel in both Scouting and schools.
- Dissemination of information on linkage/coordination materials.
- Dissemination of a filmstrip documenting Scouting's involvement in the process of linkage.
- The reporting of findings in appropriate professional periodicals and at national conferences and meetings of SCOUTING/USA and the formal education sector.

Future efforts might also consider the possibility of sending trained facilitators to local Scout groups wishing to link; and/or sending leaders for linkage workshops. This is perhaps the most effective method for reaching the

most people and effecting program change.

The above alternatives should each be given careful consideration, and any or all of them included in a comprehensive information dissemination plan.

4. Emphasis on Linkage Attitudes Within the Organization

A special effort might be made to expand the thinking of Scouting personnel to include the concept of linking Scouting and the schools in a career education effort. At the present time, a positive linkage attitude exists in a haphazard fashion in both Scouting and in the public education community.

This kind of effort is important in that results of the current project clearly indicated that a key to the success of a linkage effort was the motivation of the participating organizations to accomplish such linkage. While the development and implementation of a linkage model and the linkage personnel training program might contribute to a general climate favorable to linkage, they must be supplemented with other efforts to break down the inherent resistance on the part of any organization toward linkage. Careful attention should be given to the findings in this area that are reported in the model design of the current project and other ways of contributing to new attitudes should be explored.

5. Development of Content Relevant to Career Education

It was clearly indicated throughout the project that in order for a successful linkage program to occur, the relevant content of the educational programs of the two agencies must already be strong and effective. Otherwise, the linkage effort tends to be sidetracked by the need to strengthen the content. The result may be to add on programs that require a great deal of staff time and energy and serve to detract from the linkage effort.

It is recommended that efforts be made to develop the career education program of Scouting at all levels. This effort should be viewed as a pre-linkage requirement and can contribute substantially to the later success of a linkage program.

PART TWO

CHARACTERISTICS OF A GENERAL MODEL

AND ITS APPLICATION TO THE ALAMEDA PROJECT

The general model is described in this part of this document, first as it exists apart from any specific application and second, as it was applied to the project conducted in Alameda, California.

SECTION I: A GENERAL MODEL

SECTION II: THE ALAMEDA PROJECT: SUMMARY OF FINDINGS AND OBSERVATIONS

PART TWO

SECTION I

A GENERAL MODEL

SECTION I

A GENERAL MODEL

In this section, we will present descriptions and definitions of key linkage concepts and outline a general model for the linkage process. It should be noted that the general model is presented in order to detail a process that has potential applicability in the creation of cooperative, coordinated arrangements (linkages) among a variety of formal and nonformal educational agencies. The purpose of these linkages is to foster increased instructional/learning resource capacity that can respond to the needs of the learner in the most effective and efficient way. This general model can be used by individual agencies to generate procedural guides relevant to their specific linkage requirements.*

Key Linkage Concepts

1. Definition of Linkage

An initial definition of linkage consists of the following:

A linkage is an arrangement between organizations whose internal components allow for a mutual coordination and/or exchange of resources and activities. The expressed purpose of this arrangement is to achieve the goals and objectives of each participating organization.

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*In the case of this project, the goal of these guides would be to accomplish a linkage arrangement between the career education programs of schools and Scouting. Here, however, we will discuss linkage concepts and a linkage model on a general basis only. Application of the model to the Alameda project will be discussed in Part Two, Section II, p. 67. The development of specific procedural guides should be the next step in Scouting's application of this model.

This is a very general definition. Many of the activities that schools have been engaging in for years would fit within this definition. For instance, a local business providing speakers for a classroom career day would be a linkage activity.

From the standpoint of a linkage arrangement to expand education, the difficulty with these types of activity lies in their looseness. They are usually carried out on an informal, ad hoc basis and are not usually executed in a way that anticipates the future needs of learners. They may also lack institutional commitment. More importantly, they do not as a rule serve the purpose of creating a structural relationship among agencies that increases their potential to respond to the needs of the people they serve.

Thus, we suggest a tighter definition of linkage.

A linkage is a negotiated, authoritative arrangement between organizations (in the case of this general model, between formal educational agencies and another agency in an expanded educational space) whose internal components allow for a mutual coordination and/or exchange of resources or activities. The expressed purpose is to achieve not only each organization's goals and objectives, but also to achieve the mutually-defined goals and objectives that arise from the linkage process.

This definition implies that linkage is a conscious process requiring participating organizations to formally sanction the explicit details of goals and objectives. It should be pointed out that while the linkage activity must satisfy some portion of each organization's needs or goals, these goals or needs do not have to be identical. From the standpoint of the formal educational system, linkage activities can satisfy educational or instructional goals. On the other hand, from the standpoint of the other participating organization, linkage activities can satisfy a wide variety of goals including those that are education, public service, or personnel oriented.

For instance, a linkage arrangement between a school district's career education program and Scouting's Exploring program may satisfy a different set of needs for each organization. The school program's use of Exploring resources may satisy a need for obtaining an additional, relevant curriculum resource and the Exploring program may be satisfying its own need for reaching potential members or fulfilling a public service obligation to the community.

In addition to satisfying each organization's goals or needs, the linkage process also entails the explicit identification of goals and objectives (and the procedures and structures to meet these goals) for the linkage activity itself. Hence, in order to ensure that the linkage activity or arrangement is successful, conscious planning must occur that will result in an additional set of goals and objectives that will be unique to those engaged in the linkage process.

2. Role of Independent Linkage Agency

Up to this point, we have suggested that linkage occurs between two or more independent organizations, with overtures being initiated by one organization and transmitted to another. There is, however, another alternative. Linkage could be facilitated by a third party--an independent, relatively neutral organization. Although there is relatively little precedent for a third party facilitating the linking of organizations for educational purposes, this type of coordinating agency is relatively common in the health care and social welfare delivery systems. Benson (1974), in reviewing the literature for applied modes of coordination for welfare agencies, suggests that a third party can influence cooperative interorganizational coordination. Thus, much of the literature that may be useful to derive a model applicable to educational systems would be drawn from the health and social services fields.

3. Roles In Linkage Related Activity

Although linkage has been discussed as occurring between organizations or institutions, it must be understood that the actual coordination, planning, decision-making and implementation activities are carried out by people. These people represent the institutions and in this capacity commit the institutions to do more than they, as individuals, can do. When a third party enters the picture, another group of individuals is involved. Thus, we suggest that two distinct categories of individuals, each with differing roles, are involved in the linkage process:

(a) Boundary Personnel: These individuals represent the participating organizations and as such have the authority to go beyond each organization's limits or boundaries to perform communication and negotiation roles regarding the linkage process. A number of individuals may be included in the boundary personnel from each organization. One of these individuals should, however, be appointed as Coordinator. It will be the responsibility of this individual to coordinate the linkage process within the participating organization.

(b) Linkage Facilitator: The linkage facilitator represents the third party who may play a role in initiating and maintaining the linkage arrangement. As a result, the facilitator must possess the skills to analyze organizations, design linkage arrangements and provide the framework for implementation of these arrangements. The linkage facilitator may also provide training for boundary personnel, particularly the linkage coordinator, so that planned activities can be carried out effectively. (Note. The question of support and source of authority for linkage facilitators in the educational setting is an important issue that has not been fully explored.)

4. Costs and Benefits of Linkage

Although we are suggesting that the long-range benefit of linkage-related activities would be to expand the systems space of education, on a short-term basis there are a number of costs and benefits that each organization must consider in the linkage process. A list that was developed by Beal and Middleton (1975) follows. It has been adapted to illustrate possible costs and benefits from an educational agency's perspective. Since any one of these costs and benefits may provide powerful motivation for an organization to enter into or avoid linkage, they might best be dealt with by a third-party facilitator.

(1) BENEFITS-POTENTIAL

a. Maximize, make optimal use of or expand resources base. Resources may include money, physical facilities, equipment, supplies, publications, services, administrative staff, para-professionals, volunteers and available knowledge and skills.

b. Reduce overlap or duplication of programs or activities.

c. Enlarge scope of present programs.

d. Reach new and different groups of people.

e. Create more effective programs--programs with more impact.

f. Coordinate and integrate each organization's input into a larger program with greater impact.

g. Eliminate mistrust, competition or conflict.

(2) COSTS-POTENTIAL

a. Some autonomy may be lost.

b. Requires time and energy to initiate and maintain linkage.

c. Creates potential for experiencing difficulty in determining benefits.

d. Creates confusion as to who should take credit for success or failure.

e. Exposes organizational weaknesses.

It should be noted that additional costs and/or benefits related more directly to the specific organization participating in linkage may be identified. The linkage facilitator must be able to analyze the possible costs and benefits, to inform the participants, and to suggest strategies to deal with those that present barriers to linkage activity. We have outlined the following steps from the perspective of the linkage facilitator. The steps, however, could presumably be adapted to a linkage process in which no facilitating agency or person is involved.

Steps in the Linkage Process

In this section, we will present an image of a procedural model for the linkage process. The steps outlined in the model are derived from three sources. These include:

- The experiences of the Iowa State University Department of Sociology and Anthropology group as reported in Creating Organizational Coordination: Project Report (1975) by G. Klonglan, J. Winkelpleck, C. Mulford, and R. Warren.
- The professional development materials prepared by the East-West Communication Institute, Organizational Communication and Coordination in Family Planning (1975) by G. Beal and J. Middleton.
- The literature review and evaluation of the experiences carried out by Far West Laboratory staff.

In outlining the procedural model, particular care has been taken to include two categories of operations needed by a systemic, adaptive model. The first category is coherence: Are clear and useful sets of operations connected to each other by a logical and systemic tissue that constantly and purposefully directs these operations to a previously specified end? The second category

is adaptability: Are operations sensitive to new data and new needs that enable the structure to adjust itself or regenerate without losing power or significance while difficulties are resolved or the ends achieved? The separate phases of creating a procedural model are outlined below.

THREE PROCEDURAL DIMENSIONS

A. PRE-LINKAGE ACTIVITY

(can be carried out by facilitator meeting separately with organizations)

1. Define problem.
2. Specify set of organizations with potential to solve problem.
3. Meet with organizations to ascertain interest.
4. Determine which organizations will participate and obtain commitment of organizations to enter linkage negotiation.
5. Arrange for group meetings with boundary personnel.

B. LINKAGE ACTIVITY

(carried out in group meetings with boundary personnel)

1. Outline linkage approach and roles (conduct any training needed).
2. Obtain domain consensus.
3. Outline general task environment of each organization, including
   - goals,
   - resources,
   - functions/activities, and
   - structure.
4. Analyze specific task environment of each organization relative to linkage problem, including
   - goals/objectives,

- resources,
- functions/activities, and
- structure.

5. Specify any constraints, limitations or unique situations that may affect linkage process.
6. Based upon previous discussion, design one or more linkage configurations. (Note: This activity can be carried out by the facilitator, independent of the larger group.)
7. Select one or more linkage configurations for implementation.
8. Restate the goals/objectives for each implementation configuration.
9. Agree upon standards for the quality of the linkage program.
10. Specify and agree upon structures, roles, and responsibilities needed to attain goals and objectives.
11. Set up communication/feedback channels needed to implement linkage and to monitor progress.
12. Set up evaluation parameters and procedures.

(Note regarding points 9-12: The selected linkage configurations may require cooperation or specific activity from additional individuals within each organization. The linkage coordinator or boundary personnel from that organization must ensure that cooperation, skills, resources and communication channels are present. Additional training may be required.)

13. Implement linkage activity.
14. Provide evaluation feedback (formative and summative).
15. Adjust linkage configuration as required.

C. FORMALIZED COOPERATIVE ARRANGEMENTS

The initial trial cycle of the linkage activity, as well as adjustment of the activity based on evaluation information, should lead to a formalized cooperative arrangement between the participating agencies. As a final step, the linkage facilitator would theoretically withdraw as an integral part of this arrangement. The experience base, from which we can draw conclusions about linkage facilitator

dissapearance from the system, is extremely limited. In the health and social welfare fields, linkage activities usually continue under the umbrella of some form of coordinating agency. This may or may not be the case in the educational setting.

PART TWO

SECTION II

THE ALAMEDA PROJECT:

SUMMARY OF FINDINGS AND OBSERVATIONS

SECTION II

THE ALAMEDA PROJECT: SUMMARY OF FINDINGS AND OBSERVATIONS

In this section, we will present the findings and observations recorded in the Alameda Project as it related to the application of the general model presented in detail in the preceeding section. The documentation presented here corresponds to the steps listed there. Each linkage process general category (A. Pre-Linkage Activity; B. Linkage Activity; and C. Formalized Cooperative Arrangements) is repeated in this section, as are the specific linkage process steps (such as 1. Define problem, need or linkage area.) Following each specific step, we discuss findings and observations related to that step. All specific situations and instances discussed here refer to the pilot project experience in Alameda.

A. PRE-LINKAGE ACTIVITY

1. DEFINE PROBLEM, NEED OR LINKAGE AREA

In considering a linkage program, it is best if both groups have a strong program going before attempting linkage. If programs do not exist, perhaps the first task is to develop them. It seemed apparent throughout the Alameda

Project that a successful linkage program is most likely to occur when the relevant content of the educational programs of the two agencies is strong and effective. Otherwise, the linkage effort tends to be sidetracked by the need to strengthen the content. The result may be add-on programs that require a great deal of staff time and energy and serve to detract from and weaken the linkage effort.

If linking the formal and nonformal educational sectors in programs in career education is a goal, establishing a minimal level at which existing career education programs can function may be the first priority in both the formal and nonformal educational sectors. Developing new career education programs may also be necessary. This effort should be viewed as a pre-linkage requirement and can contribute substantially to the later success of a linkage program.

Organizations that have strong programs may pinpoint a need that is impossible or difficult for the organization to fill alone. The subsequent effort on the part of that institution or organization to achieve acknowledged goals by working in conjunction with another institution or organization will generate the linkage program.

An organization may seek to establish a linkage effort for the following reasons:

- to offer an integrated learning experience;
- to avoid unnecessary duplication of effort;
- to share material and experiential resources; or
- to share physical resources.

In the Alameda Project, the Scouts expressed a need to broaden community awareness of and involvement in their program. The schools perceived and voiced a need to improve their career education program. For both organizations, the internal resources needed to accomplish these goals were limited.

A second problem to consider before implementing any linkage activity is the attitude of organizational personnel in general toward linkage itself. A special effort might have to be made to encourage individuals within a given organization to include the concept of linkage in their basic attitudes toward their own and other organizations. Presently, within Scouting, interest in linkage with public schools exists primarily on the Exploring level and even there the attitude is not shared by everyone. In the public schools, interest in linkage is probably most prevalent in career and vocational education programs, but again it is not an interest shared by all educators. Therefore, if Scouting wishes to link program efforts with public schools, care must be taken to lay the groundwork in both organizations to deal with inherent resistance.

2. SPECIFY SET OF ORGANIZATIONS WITH POTENTIAL TO SOLVE PROBLEM

In exploring the concept of linkage, Far West Laboratory invited the Alameda Unified School District and the Alameda Council of SCOUTING/USA to participate in a pilot linkage program. With support from Far West Laboratory, the two agencies decided to attempt to meet their organizational needs together.

In this pilot test situation, Far West Laboratory provided the motivation for the linkage effort. Otherwise, because the issue of motivation is crucial, the motivation for each organization's participation in the project should be carefully assessed. Linkage efforts work best when the organizations--and especially the boundary personnel--are highly self-motivated to participate and when the motivation level of each organization is about equal. While this is not always possible, participating organizations should be carefully chosen with this ideal

in mind.

Once it is decided that Scouting's career education program could be enhanced through linkage with the career education program of the public schools, potential schools should be considered carefully. Insofar as it is possible at this point, an assessment of their potential for linkage--including their motivation for such an interaction--should be made.

In the Alameda Project, initial contact was established between the Principal Investigator of the Far West Laboratory project and the Superintendent of Schools in Alameda, who was also a member of the Board of Directors of a local Bay Area Scouting group--the Golden Gate Consortium.

The selection of the people who will be involved in these exploratory meetings is very important. Inaccurate assumptions about the organizational structure are easy to make. For example, it should not be assumed that a superintendent of schools has unlimited power to direct a district to participate in a project. It is possible, and perhaps even likely, that a school district will be decentralized and individual school principals will be allowed to determined what is or is not offered in their own schools. At this stage of the project, however, interest alone is being sought and should not be confused with a need for definite commitment.

It is also important to remember at this stage not to oversell what each organization has to offer. Expectations, promises and commitments should be as clear as possible to all of the participants in advance. (One problem encountered at this point is that everything about the project cannot be known and some people may be uncomfortable with that uncertainty.) In an attempt to interest an organization in becoming involved in a new program, it is easy to paint a bright but distorted picture of what they will get out of it. It would be better to err on the negative side so that unexpected gains are bonuses. In any case,

an attempt should be made to be realistic about the possible outcomes of the potential linkage arrangements. This concern should be kept in mind throughout the project and periodic checks should be made to see that expectations continue to be realistic.

4. DETERMINE WHICH ORGANIZATIONS WILL PARTICIPATE AND OBTAIN COMMITMENT FROM ORGANIZATIONS TO ENTER LINKAGE NEGOTIATION

Once the initial approach to each other's organizations is made and the interest is established, other organizational representatives should be involved. In the Alameda Project, other representatives of the Golden Gate Consortium were invited to meet with the Far West Laboratory Principal Investigator for the project and the Superintendent of Schools in Alameda to discuss the project further. The primary goal of this type of meeting should be to obtain the commitment of the organizations to enter linkage negotiation, rather than to enter a linkage agreement.

If interest in the linkage effort continues to be high, representatives of the two organizations at the next level can be contacted. In the Alameda Project, these representatives included district level personnel in the schools and continued to include the Council Executive (who was already involved) for the Scouts.

Some school representatives felt that if one organization uses paid personnel (such as the schools) and the other operates primarily with volunteers (such as the Scouts), the impetus for the linkage activities should come from the voluntary organization. They felt that the paid personnel might be reluctant to request that volunteers do more work than they are already doing.

5. ARRANGE FOR MEETINGS WITH BOUNDARY PERSONNEL

Boundary personnel can include representatives from all affected levels of any participating organizations. They should be involved early on in the linkage effort. Care should be taken not to overlook personnel at any level, even

though a particular level of the organization may not be immediately involved or obviously affected by the linkage activity.

In the Alameda Project, for example, school principals were not working directly with the linkage program and were therefore not included in the meetings with boundary personnel. However, the principals' schools and staffs were affected by the program activities conducted in the program and those principals were consequently very concerned about what was going on and what impact it might have on their school programs. Had they been better informed and consulted in advance regarding plans, they not only would have felt better about the project, but would have been able to contribute to pilot plans. They would have been useful in designing the program, since they have an overview of the school that nobody else shares.

Similarly, in the Scout organization, unit level personnel (Scout leaders) should have been included in this phase of the program development. They should have had the opportunity to be involved in plans that would affect their units, and to offer information that could have contributed to the development of the project.

In selecting the committee or group to serve as boundary personnel, the "Army Volunteer" method of selection is probably least effective. The committee will require a great deal of time, energy and creative spark, and members who are highly motivated to sustain that enthusiasm should be chosen. It is also important that the members from each organization be about equally motivated. If one group is overly enthusiastic and the other is tepid, the work will not progress as smoothly as it might otherwise.

When a person who is to be involved in implementing linkage has received directives from the top, the facilitator can expect to find some initial resistance. Such directives may be viewed by the person as requiring "extra"

work and the benefits may not be clearly recognized. The situation can be a very uncomfortable one for the person, since he/she may find it impossible to refuse to carry out directions presented by a superior. The need for self-motivation is once again evident, since problems may still exist even when there are very definite benefits for the person or for his/her organization.

Once boundary personnel have been selected and have agreed to participate in the linkage effort, a series of meetings can be planned. Waste and delay can be kept to a minimum by polling members before each meeting to determine their agenda priorities. At meetings, members should be provided with agendas. Room should be left for changes, additions, corrections, etc., but members need to be aware of what must be accomplished at the meeting. They may just need to know the items and the persons responsible, but not necessarily time segments.

People participating in such committees as this one seem to work better if they can perceive immediate rewards. It is not enough to see some overall general gain for the organization, for the learner, or for the committee member. People have time limitations and like to be able to see some gain for themselves in the extra time and effort that this kind of project requires. Personnel must not be misled into believing that there will not be extra work required.

Another factor that should be kept in mind is that at the beginning of any experimental or new program, there is anxiety about failure. It should be assumed that people in the position of starting a new project that entails putting something new before their organization and before the public are bound to wonder about its chances for success. Anxiety will increase as the event or project starting time approaches. It can be expected that complaints and hesitations will mount at about this time, and that committee members will require extra reassurance and support from any facilitator or facilitating organization. In the Alameda Project, for example, almost everyone felt at one time or another

that they were doing more than they should be doing--and some felt that they were doing more than anyone else was doing.

People have to be continually shown the value of a project or activities. It is not enough to demonstrate this worth once. The whole problem of perceived rewards must be reconsidered on an on-going basis. Linkage programs especially seem to require long-range effort and to provide mainly long-range, diffuse rewards. It can be easy for those working on the program to lose sight of those distant goals.

A group of support people in the involved agencies should also be identified. This might be the function of the facilitating organization. In the Alameda Project, a Far West Laboratory team was formed to support the linkage effort. This team organized meetings, took notes, reported on meetings, handled clerical tasks, gathered data and analyzed it, and communicated among the various representatives of the two organizations.

If at all possible, boundary personnel can be freed from some regular duties since the amount of time required to design and implement a linkage project usually turns out to be more than anyone anticipates at the beginning, as often happens with any new program. If time is allotted for the participants to meet and plan together, they may avoid reaching the point of feeling overwhelmed by the demands of the project and thus manage to sustain the necessary motivation.

B. LINKAGE ACTIVITY

1. OUTLINE LINKAGE APPROACH AND ROLES (CONDUCT ANY TRAINING NEEDED)

It is important to educate the leaders of the linkage effort before any work begins on the actual development of the linkage itself. The purpose of this

step in the process is to introduce participants to the general approach and outline of activities that will be followed in designing a specific linkage program. The objective is not to reach specific conclusions but simply to ensure that all participants understand where they are going and the type of process that will be used. To accomplish this, high-level personnel from both organizations can be invited to the initial meeting where this instructional process occurs. (They may or may not need to attend subsequent meetings of this group since they can be kept informed by receiving minutes of the meetings and by periodic personal contact with a representative of the group.)

Procedural guides may be useful in working with the boundary personnel. If representatives from both organizations can consult written guidelines, some confusion is eliminated from the communication process. Boundary personnel do not necessarily need to spend their time developing such guides; it is probably more effective to present them with guides that were developed in advance of boundary personnel meetings.

In the Alameda Project, the Design Committee functioned with verbal directives since by and large written procedural guides did not exist. The Design Committee's evaluation of the process -incorporated into this report, and especially this section of the report, in the form of suggestions or recommendations--can be used to develop procedural guides.

It would also be appropriate at this point to conduct training regarding the linkage process. Since linkage requires real skills, the training program would focus on problem exposure within the functional context of linking organizations. The program should also focus on the experiential rather than the study mode. Although a training program for linkage personnel was not developed in conjunction with this study, such programs do exist. A prototype is characterized on pages 49 and 50 of this report.

2. OBTAIN DOMAIN CONSENSUS

Domain consensus means that each participating agency in the linkage activity agrees that the other agency has a legitimate responsibility to carry out certain activities, functions, etc. For example, the school must believe that the Exploring program of SCOUTING/USA has an appropriate role in carrying out Career Seminars, if the seminar program is to be successful. Because of their unique positions as interorganizational touch-points, members of the Alameda Design Committee became crucial elements of the linkage model as boundary personnel and it was through them that domain consensus was sought.

3. OUTLINE GENERAL TASK ENVIRONMENT OF EACH ORGANIZATION

It is important to look carefully at the general task environment of each organization. A first responsibility for boundary personnel would be to gather all the documents that would be required to accomplish this goal. Such items might include:

- an organizational profile of the organization (including various levels within the organization);
- a description of the overall goals and programs of the organization;
- a statement of guidelines or frameworks, especially in relevant content areas;
- policy documents that may affect the conduct of the project;
- specific implementation guidelines relevant to the above items.

Once these documents have been collected, it then becomes the task of the boundary personnel to make an accurate representation of their organization to the other agency. There are two difficulties in this process. First, the personnel may be so close to the structure of their own organization that they overlook functions, goals, etc., that may not be obvious at all to the other

organization. Some goals and functions may also not be perceived by the personnel as relevant to the project, even when they may indeed be relevant. It then becomes the responsibility of the facilitator to point out such relevance. To do so, the facilitator must become familiar with each organization.

The second problem is that a person may become aware of weaknesses within his or her own organization while representing the latter to an outside organization. Whether these deficiencies relate to structure, communication processes, program content, staffing arrangements or goals, their public exposure may prove uncomfortable, and for that reason or for other valid organizational reasons, the personnel may not wish to have those weaknesses revealed. On the other hand, if they are not brought out and accounted for in plans, they can cause difficulties later in implementing linkage programs.

Another task area that merits special attention encompasses all those organizational goals and objectives that help the organization maintain itself. These types of goals and objectives may be overlooked since they tend to operate on a more or less unconscious level in the organization. Administrators are probably in the best position to observe and therefore identify these goals and objectives, and they can be involved actively in the process of describing the organization. As linkage efforts are considered, the "institutional maintenance goals" of each organization can continually be kept in mind and needs can be met so that each organization can continue to participate in the project. For example, such responsibilities as staff development, stocking and maintaining supplies, keeping up with reporting functions, fulfilling staffing demands and (in the case of volunteer organizations) fund raising and volunteer training need attention for the organization to survive.

If personnel are operating at peak level simply to meet the basic survival needs of the organization, they may balk at being asked to assume an additional

work load to effect linkage, unless the linkage process or program itself eases the load necessary for maintenance.

The institutional maintenance goals and objectives of both organizations can be compared. Then the boundary personnel can investigate the kind of cooperation that is possible in those areas. The facilitating agency could assist in providing a structure for that cooperation, which would free time for the primary linkage efforts to be effected. Comparisons should be done at various organizational levels, so that cooperative programs can be designed to meet the needs of the various levels.

4. ANALYZE SPECIFIC TASK ENVIRONMENT OF EACH ORGANIZATION RELATIVE TO THE LINKAGE PROBLEM

After participants understand the general task environment of each organization, it is appropriate to concentrate on the specific problem that has provided the rationale for the linkage activity. Both goals and functions should be examined.

(a) Goals

In linking educational programs, it may be necessary to determine the overall goals and objectives of a given (educational content) area within the organization by first extracting those goals and objectives and identifying them from program materials. Conducting a content analysis of the existing materials of a given organization may be the way to accomplish this. However, since this is a time-consuming task and one which requires certain skills on the part of the analyst, this function might be provided by the facilitating organization.

It may be useful to categorize goals and objectives for the purpose of organizing any programs that are to come out of the linkage effort. Goals and objectives can each be placed into three categories: attitudes, skills, and knowledge. Once these categories are established, it will then be possible

to look at the total set of goals and objectives of the two organizations and determine overlap.

Goals can also be considered on various organizational levels. The learner level, especially, should not be overlooked since all other levels are generated from it.

Specific charts for goals/objectives comparisons can be helpful. Analysis done verbally in group situations can help everyone deal with the issues and ensure that everyone "speaks the same language."

To accomplish this task area most efficiently, the general direction of the linkage effort must be remembered although the more specific goals and objectives of the linkage effort will come from the process of analyzing the specific task environment. In Alameda, the goals and objectives of the school's career education program were compared with the goals and objectives of Scouting's program where it related to career education. It was found that the degree of overlap increased as the career education programs increased in content and emphasis. The most active programs, as might be expected, were on the high school/Exploring level. The most active pilot program, the Alameda Community Career Awareness Project (ACCAP), developed at that level (and included upper Middle School.) On the other hand, career education programs were virtually non-existent at the lower elementary/Cub Scouting level and relatively little career education linkage activity occurred there.

All possible resources can be considered. It should be remembered that the best resources are often too close to be seen clearly and thus may go unused. Each organization must put itself in the position of the other organization and look at their own resources from that perspective. Resources can include facilities, materials, personnel, services, connections within the community, community networks, courses, already existing linkage arrangements, etc.

In Alameda, resource sharing went on in a variety of ways and on a variety of levels. An existing linkage arrangement--the use of school facilities by Scouts--was expanded when the ACCAP Scouts held an orientation meeting and various activities in one school library career center. Scouts used school personnel to schedule and chaperone trips, and to teach relevant classes. They used the school system itself as a way of contacting, organizing and reporting on special Scout activities. The school used the Scout organization to secure transportation and insurance for the series of career-related events, to provide supplementary materials in the career centers and in classrooms, and to motivate students (via achievement of Merit Badges) to participate in career exploration.

5. SPECIFY ANY CONSTRAINTS, LIMITATIONS OR UNIQUE SITUATIONS THAT MAY AFFECT LINKAGE PROCESS

Potential constraints or conflict areas can be identified in advance so that plans can be made to deal with them when they arise. For example, legal constraints on the schools regarding insurance responsibilities might affect linkage plans, as would certain other administrative considerations. Brainstorming sessions might be helpful here. If as much trouble shooting as possible is done in advance, it is less likely that the project will have to operate in a crisis mode and respond to, rather than prepare for, conflict areas.

Some details to consider might be how credit should be granted to students/Scouts involved in linkage programs and how the granting of credit can be administered so that strict accountability is maintained.

Boundary personnel may resent any members of their group who regularly fail to show up, come late, leave early or do little work. This kind of behavior seems to occur more often at higher levels of the administrative ladder since administrators are often committed and tend to see their function as one of getting things rolling, after which they may leave. The "workers" tend to resent this. Tasks should be allocated to people early enough that they are able

to meet their deadlines.

Any committee member may have a "hidden agenda" that may weaken or detract from his or her contribution to the whole process. Administrators, for example, may be as interested in "spin-offs" from a given program as they are in the program itself, and therefore may not focus efforts on having the program succeed. They may want, for example, to establish an interaction with the facilitating organization, and thus may view the linkage effort as a way to accomplish that goal. An administrator who feels this way would probably declare the project a success if such an interaction occurs. However, a teacher in the same group might look upon the same results as a failure.

Problems may also occur if boundary personnel from the two organizations are not regularly available for meetings at the same time. For example, in Alameda, the teachers could be given release time so that they could meet during the day. Scout leaders, on the other hand, are volunteers and could not miss their regular employment for linkage meetings. Furthermore, they were committed to a great deal of volunteer time in the evenings and on weekends and were thus unable to give additional time to the linkage project. The problem then became one of arranging/coordinating a schedule agreeable to both parties. This problem was considered by some people involved in the Alameda Project to be significant enough to strictly limit any linkage effort.

It should also be pointed out that communication problems sometimes stem from the way the language used by education and educators differs from that used by other agencies. Educational jargon can be obscure to nonformal educational organizations. The resulting communication gap might need to be bridged through the establishment of a common terminology.

When the nonformal agency is run by volunteers, there is also a tendency for the volunteers to want pre-packaged programs: they may resist becoming

involved in a joint effort to develop new ideas. Educators, on the other hand, often welcome the opportunity to join other professionals in development sessions where they can deal with their content areas on a more abstract level than that required by the daily demands of the classroom. The two groups, then, may have opposing needs, and conflict may result. In this spirit, teachers may resent nonformal educational personnel who wish only to be "told what you want me to do," whereas nonformal educational agency personnel may resent teachers who "just want to sit around and talk about great ideas."

Another problem for volunteers in nonformal organizations, especially if they are good workers, is that they are often overworked. With Scouts, for example, the volunteer who is involved with an active troop runs a very full schedule, and has little time left over to expand into new areas, whereas the less organized, less active unit may have the time but not the ability or the commitment to undertake the task.

A special problem arises if the program serves a limited number of people. Explanations may need to be made to the organizations and to their communities so that people not involved will not be envious of special programs and upset when they are not included in them. In the long run, this limitation can be advantageous because as the program grows, others will want to participate and will view doing so as a privilege rather than an obligation.

Other potential problem areas to consider are insurance, budget, school holidays and the calendars of each of the organizations.

6. BASED UPON PREVIOUS DISCUSSION, DESIGN ONE OR MORE LINKAGE CONFIGURATIONS

The facilitator is perhaps the best person to design the linkage arrangement(s). He/she is more likely to be attentive to the need to build upon existing programs rather than trying to start new ones, while personnel within the organization may be inclined to want to use the linkage process to begin new programs.

Also, the facilitator's experience in this process will give him/her the perspective to establish realistic goals for the linkage program, whereas organizational personnel, who may have no precedent upon which to rely, will not be cognizant of realistic expectations and limitations.

The best focus might be upon using the linkage to find new ways to do tasks already desired by the organizations. New tasks, on the other hand, may require new management structures, etc., and probably should not be undertaken as an initial linkage effort. They might realistically grow out of that effort, however, and become part of the second stage of the linkage process. If, in other words, responsibilities can be handled more efficiently as a result of the linkage, the organizations may then have the free time to take on new tasks.

The facilitator can consider a range of alternative plans, from those requiring a low level of commitment and time through those requiring a high degree of interaction, using parameters that have been determined by the two organizations in their meetings up to this point. The range of alternatives will then allow boundary personnel to make choices and even to incorporate certain aspects of various choices into an entirely new alternative plan.

7. SELECT ONE OR MORE LINKAGE CONFIGURATIONS (OR PROGRAMS) FOR IMPLEMENTATION

Once the facilitator, in cooperation with all or selected boundary personnel, has outlined various alternatives, the entire committee should meet to select the final plan. While this difficult and time consuming, but crucial, process is taking place, a linkage coordinator representing each organization should be chosen and the duties for these two positions (one for each organization) clearly written down. Selecting these coordinators may involve creating a new position within each organization and hiring a new person to fill it, or it may mean incorporating these duties into an existing position. Ideally, this position would eventually become a permanent one--if the linkage effort itself became a permanent relationship.

At this point, it would be worthwhile to take another careful look at any constraints, limitations or unique situations that might affect implementation of the selected configuration. It may be difficult for personnel to work in this way--anticipating program difficulties, strengths and weaknesses at a rather early stage in the project. However, the more time they spend on this task at this stage, the more likely that problems will be minimized when the program is actually put into effect.

8. RESTATE GOALS/OBJECTIVES FOR EACH IMPLEMENTATION CONFIGURATION

After a program has been selected, a pre-operational time line must be developed that sets up the goals and deadlines necessary to get the program underway. The aims of each configuration can then be considered one by one and discussed thoroughly by the boundary personnel. This is the time to reach a consensus, hear about disagreements and conflicting goals, and address problems.

9. AGREE UPON STANDARDS FOR QUALITY OF LINKAGE PROGRAM

Some discussion should focus on the minimum standards of quality each organization expects from the program in order to consider it a success. If levels of expectation are significantly different between the two groups, appropriate readjustment of effort may have to be made. While the two organizations do not have to have identical standards, they do need to know each other's expectations.

10. SPECIFY AND AGREE UPON STRUCTURES, ROLES, AND RESPONSIBILITIES NECESSARY FOR ATTAINING GOALS AND OBJECTIVES

The tasks required of the various people involved in the project can now be clarified. It is probably best to specify those tasks in writing and ask individuals to respond to them. Once a person has agreed to handle a given task, someone must check to see whether or not it is actually completed. The check-point person should probably be the Linkage Coordinator for each organization. Their check person should be the Linkage Facilitator. It is advantageous to everyone if people are held to their task agreements. This support

encourages them to successfully complete the tasks and assures that the project will move forward as planned.

When possible, the people from each of the two organizations who are most directly involved in a program or event can be placed in direct contact with each other. In the Alameda Project, some confusion was created when middle-people relayed messages from school representatives to Scout representatives, and vice-versa. It is probably best to foster direct communication between the two organizations' representatives. The facilitator should also be included at first so that negotiations at this level do not bog down in misinformation, lack of motivation, etc.

At least one person in the Alameda Project felt that linkage should not occur on an institutional basis, since it is unlikely that all the teachers in the Alameda Unified School District, for example, would be enthusiastic about a particular project. She suggested that the commitment be made on an individual or school/faculty basis. These kinds of preferences can be elicited from boundary personnel and discussed.

It should also be pointed out that each individual can be considered not just as a member of the organization he/she represents here, but also in terms of his/her outside contacts, such as the Rotary Club, business interests, etc., which might prove useful to the project.

Among roles the facilitator may play, a most important one is understanding the degree of responsibility each organization and each individual is willing to assume at any point in the linkage process. This can be a complex problem to assess, since there are as many different answers to the question of how much responsibility should be allocated as there are organizations/individuals. In the Alameda Project, for example, the Far West Laboratory facilitator felt it was appropriate at a given point to transfer responsibility

for the administration of a specific series of events to the schools and Scouts. This intention, however, was resisted by both organizations. For the Scouts in particular, the transferred responsibility involved too much work and almost caused them to drop their participation completely. As a result, the facilitator took back the basic responsibility for such logistics as notices to students, directions for transportation, phone calls, etc. These tasks would perhaps have been more efficiently and more appropriately done at either the school or Scout site, but would have required extra staff.

11. SET UP COMMUNICATION/FEEDBACK CHANNELS NEEDED TO IMPLEMENT LINKAGE AND TO MONITOR PROCESS

Communication may be one of the most important and difficult problems in the linkage process, since misinformation is common when a program begins and a few misplaced comments may be enough to raise expectations to an unrealistic level or otherwise damage eventual program results. Similarly, a lack of intraorganizational or interorganizational communication may cause those working on the project to feel that their efforts are being undervalued, thereby dampening their enthusiasm for the program.

To avoid these and other difficulties, contact should be maintained with everyone involved in the project so that participants understand what each organization expects and what each is capable of contributing to the linkage effort. Since everyone involved will probably want regular and frequent progress reports, establishing a format for some type of systematic weekly progress summary would be highly useful. Contact may need to be maintained not only with boundary personnel, but with leaders in the respective organizations, using interviews, conferences, memos or whatever other means seem most effective. If students are involved in programs with special requirements, parents too will appreciate being kept informed. Since local media are often especially receptive to community news, information on the project should also be sent to community newspapers, TV, etc., as well as to school publications.

If good communication is to be maintained between the linkage facilitator and boundary personnel, the facilitator must be careful to keep commitments made to the organizations and to the boundary staff. If commitments cannot be met, this should be stated and amends made if possible, since loss of credibility could seriously damage the success of the project. A related concern would be to caution boundary personnel to clearly label any possibilities they discuss with others as possibilities rather than certainties.

Establishing feedback channels that can be clearly seen and easily used by all members of the boundary personnel group will be helpful. Members can thus be made to feel that their input is important and can be encouraged to report frequently to their Linkage Coordinator and/or to the facilitator. To this end, a procedure for reporting on events might be established. First, however, the purpose and value of such reports should be determined so that only those that are relevant are requested. The person who is asked to complete the report should not feel that it is merely busywork.

The facilitator, the linkage coordinators and even the boundary personnel should not assume that communication will take place without a conscious effort to encourage it. For example, they should not think that someone has contacted a list of people to inform them of some event, just because that task would logically be assigned to a person having that particular position within the organizational structure. Specific tasks for a specific person will depend on the person's role in the linkage arrangement. Both tasks and roles should be defined.

To ensure that a project is proceeding as smoothly as possible, a monitoring system can be devised to keep close touch on the program. This might include observations, logs, notebooks, calendars, interviews or regular phone calls. Standardized forms may facilitate this record-keeping process. Whether the facilitator or linkage coordinators solicit written reports or other types of

information, he or she should report results back to participants so that they will know that their work is being recognized. The more immediately the facilitator or coordinator gives credit and acknowledgment to people who accomplish tasks, the more likely they will feel supported. Communication between and among project participants and others can be established through use of some of the following methods and materials:

- A newsletter reporting activities and results to participants in the programs.
- Regular progress reports to local review committees and consultants.
- Distribution of a project brochure to content-related (career education) personnel in formal and nonformal sectors.
- Distribution of information on linkage/coordination materials.
- Production and distribution of a filmstrip documenting the process of linkage.
- Reports on the project in appropriate professional periodicals, at educational conferences and at meetings of participating organizations.

The above alternatives should each be given careful consideration, and any or all of them included in a comprehensive communication plan.

It is important to keep these public relations efforts in mind so that such people as parents of participating students, educators and the community in general are kept informed of the project's progress. When necessary, the linkage facilitator and/or the linkage coordinators can accompany project personnel when they talk with people who need to know about the project, since each of these participants in the project can contribute information that the others do not have. The project coordinator for example, may have an overview of the project while the project site-person has more specific information about a given program or event.

12. SET UP EVALUATION PARAMETERS AND PROCEDURES

Early in the project, plans for evaluating the success or failure of all

aspects of the program can be discussed. One reason for doing this is that setting up evaluation parameters helps clarify--and, in some cases, even determine --project goals.

In addition, deciding what information is needed and what means should be used for gathering it may keep the group from letting some event or stage slip by undocumented. If tests, questionnaires, etc., are necessary for validating the project effort, they need to be prepared in advance. For example, in discussing the evaluation plan, a need may be recognized for both pre- and post-testing to determine student growth in a certain area. Early planning will allow these tests to be carefully constructed. Such tests are not easily developed and may require the assistance of evaluation specialists.

It may be sufficient to let a small sub-group from the boundary personnel committee work on the evaluation considerations for the project and submit their findings and recommendations to the larger group for approval.

Part of the evaluation effort might include a rather straight-forward documentation of the project itself, which might take the form of photographs, reports, notes, etc. The purpose of such a documentation would be to illustrate what has been accomplished to others. Since accountability is of primary concern to most educational organizations today, the documentation might serve to achieve that aim. However, it also might be a means of training other personnel within the organizations--or the boundary personnel from new organizations--so that they will have techniques for accomplishing interorganizational linkage. The visual documentation then might become a part of the training package for boundary personnel.

13. IMPLEMENT LINKAGE ACTIVITY

While this seems to be a rather simple statement and occupies no more space here than any other, this is one of the more complicated and active

steps in the linkage project, since it is the culmination of all other steps. During this period of time, there will be a great deal of activity, and many adjustments may need to be made under time pressures in order to accommodate and account for unanticipated problems or inadequately-made plans.

It would probably be a good idea to have a trouble-shooting team, comprised of the facilitator and representative boundary personnel, who could make themselves available to project participants for consultation during this period of time. Individuals could decide how difficult it might be to solve a particular problem and if they could not handle it themselves, could refer it to the trouble-shooting team, which might have regularly-scheduled meetings to deal with such eventualities.

The Alameda Project did not have such a team, and people running some projects seemed to feel that the linkage efforts were almost beside the point. The Design Committee worked throughout one semester to come up with linkage activities, but they were carried out in a somewhat isolated way. Individual participants tended to view the linkage effort as fragmentary, perhaps because there was no interchange via group meetings and discussion during this time. The only person who maintained a comprehensive overview, and therefore saw more evidence of linkage than anyone else was the Far West Laboratory facilitator. (To a lesser extent, other Far West Laboratory staff members also saw the whole effort.) The continuation of regular Design Committee meetings during the pilot test phase would have given people the opportunity to share their concerns and successes. In this way, the feelings of isolation might have been decreased.

It may be worth planning for the possibility that participatns, as well as observers in the organization and the community, will sometimes identify one part of a project--such as a series of coordinated, highly-visible events--

as the total project. Public relations efforts within the boundary personnel group, the organization itself, and the communities involved might attempt to clarify or emphasize the total project.

14. PROVIDE EVALUATION FEEDBACK

Evaluation feedback can provide closure for a project, as well as indicating the possible future directions a program may take.

The evaluation might include any projects, programs or events that have grown out of the original project, whether or not they were specifically designed as part of that original linkage project. Once the concept of linkage has been brought to the attention of the organization, representatives of the organizations may be able to recognize certain projects, programs and events they are already conducting as linkage efforts. For example, in Alameda, it was acknowledged that a law enforcement class conducted by police in the schools had grown out of a Scout Explorer Unit in law enforcement.

Evaluation results can be communicated to the people involved in the project to allow them to adjust their behavior in ways that will achieve the desired goals. Without such communications they may simply repeat mistakes. If questionnaires, tests, etc. are quickly tallied and analyzed and reports made to participants, adjustments can be made in time to affect future linkage efforts between the organizations.

15. ADJUST LINKAGE CONFIGURATION AS REQUIRED

Follow-up meetings of boundary personnel will allow them to focus on the adjustments that seem to be called for as a result of the evaluation conclusions. This final step can then lead to a formalization of the linkage arrangements.

In adjusting linkage configurations, boundary personnel can view themselves as experienced in linkage efforts and can look at other members of the two organizations who may now join the linkage efforts as being at a different

level of familiarity with and expertise in linkage. The boundary personnel may wish to consider how best to introduce linkage to those people who may be interested but inexperienced. In doing so, they can think back to their own reactions, needs and areas of confusion when they were in that position. They may remember, for example, the importance of outlining and providing payoffs for each organization and for the boundary personnel involved.

At this point, the boundary personnel will also probably consider how best to disseminate the project idea to other groups within the educational community who have the potential for participating in the on-going linkage or for establishing linkage arrangements of their own. Visual presentations discussed earlier are sometimes a very effective way of presenting a new idea.

C. FORMALIZED COOPERATIVE ARRANGEMENTS

The problem of institutionalizing the linkage arrangement so that it is not dependent on the individual or the small group is a difficult one. In fact, there is some question as to how desirable such a formalization of the linkage arrangement is and how long a given formalized arrangement should exist to be most effective. The issue of calcification of institutional arrangements might be kept in mind here.

However, if linkage is to accomplish much, it probably requires some types of formalized and institutionalized arrangements. While these may have been accomplished throughout the year on a short-term, limited or even informal basis, a time may come when one or both organizations conclude that more formalized arrangements would be appropriate. A logical time when that issue might arise is at the end of the first year.

Since linkage implies a set of ongoing activities and requires organizational changes and agreements, provision should be made for setting up institutional plans and changes that ensure the successful continuation of linkage activities.

This is a guarantee that linkage activities will become an integral part of the organization's ongoing plans.

There may, then, be a need for a "statement of agreement of formal cooperation" between the two organizations. Such an agreement may, in fact, be one goal of linkage projects.

PART THREE

DOCUMENTS REPORTING ON THE CAREER EDUCATION PROGRAM OF SCOUTING/USA

This part of the report contains three documents developed to meet project goals. The first document is an analysis of the career education content found in the unit level materials of the Cub Scouting Division. The second document is a similar analysis of unit level materials of the Scouting Division. The third document is a prototype procedural guide to assist Exploring Executives and others interested in conducting a career seminar program. Each document is self-contained.

DOCUMENT I: Study Report on Career Education Content in Unit Level Materials of the Cub Scouting Division of SCOUTING/USA

DOCUMENT II: Study Report on Career Education Content in Unit Level Materials of the Scouting Division of SCOUTING/USA

DOCUMENT III: Career Seminar Resource Packet

STUDY REPORT

Career Education Content in Unit Level Materials* of the CUB SCOUTING DIVISION of SCOUTING/USA

ANALYSIS AND RECOMMENDATIONS

*Unit Level Materials

I. CUBMASTER'S PACKBOOK
II. DEN LEADER'S BOOK
III. WOLF CUB SCOUT BOOK
IV. BEAR CUB SCOUT BOOK
V. WEBELOS DEN LEADER'S BOOK
VI. WEBELOS SCOUT BOOK
VII. STAGING DEN AND PACK CEREMONIES

Bela H. Banathy
Dru Robinson
Diana Studebaker
Celia Chesluk
David Stein

Prepared for SCOUTING/USA
May, 1977

Instructional and Training Systems Program
FAR WEST LABORATORY FOR EDUCATIONAL RESEARCH AND DEVELOPMENT
1855 Folsom Street, San Francisco, California 94103

The purpose of this study report is to present an analysis of the career education content in the unit level materials of the Cub Scouting Division of SCOUTING/USA.

The first section of the report presents a comparison of the Cub Scout purposes with general statements from career education, as they appear in selected state and U.S. Office of Education (USOE) documents. Following this goals comparison is a detailed analysis of the Cub Scout materials used at the unit level for leaders, parents, and youth.

SECTION ONE

GOALS COMPARISON

The U.S. Office of Career Education and various State Departments of Education have developed career education goal statements, organized into such areas as: self-awareness, educational awareness, career awareness, economic awareness, decision-making, beginning competency, employability skills, and appreciations and attitudes (Arizona State Department of Education). For each of these areas, specific objectives suitable for grade levels from primary through senior high have also been developed.

The purposes of Cub Scouting*, as stated in the Cubmaster's Packbook, p. 3., can be related to typical career education goal statements as follows:

CUB SCOUT PURPOSES	TYPICAL CAREER EDUCATION GOAL STATEMENTS**
INFLUENCING THE DEVELOPMENT OF CHARACTER AND ENCOURAGING	(After leaving school, the learner will be) "Capable of choosing a personally meaningful set of work values that foster in them a desire to work; successful in incorporating work values into their total personal value structure in such a way that they are able to choose what, for them, is a desirable lifestyle..." (USOE) "Develop a positive attitude toward self and others, a sense

*One purpose of Cub Scouting, "Preparing them to become Scouts," does not, as it is stated, relate directly to career education goal statements.

**The source for each goal follows the statement and is indicated in parentheses.

CUB SCOUT PURPOSES	TYPICAL CAREER EDUCATION GOAL STATEMENTS
Cont'd. SPIRITUAL GROWTH	of self-worth and dignity, and motivation to accomplish personal goals." (CA) "Elementary students will learn the importance of establishing (although tentatively) personally relevant goals upon understanding of oneself." (Nevada)
DEVELOPING HABITS AND ATTITUDES OF GOOD CITIZENSHIP	"Develop a positive attitude toward work and appreciate its contribution to self-fulfillment and to the welfare and productivity of the family, community, the nation, and the world; develop an understanding of the U.S. economic system and become aware of the relationship of productive work to the economy and to one's own economic well-being." (CA) "Elementary students will be aware of themselves in relation to others in the community outside their families; become aware of the rights and responsibilities they have within various groups; realize that many institutions and organizations exist because of definite needs within the community." (Nevada) "The student will begin to develop an understanding of the economic relationship between himself, family, and community." (Arizona)

CUB SCOUT PURPOSES	TYPICAL CAREER EDUCATION GOAL STATEMENTS
IMPROVING UNDERSTANDING WITHIN THE FAMILY	"Elementary students will recognize the various different roles played in a family in order to solve problems and achieve goals; become aware of the rights and responsibilities they have within their families and school environments; understand the importance of interdependency of workers by relating it to family needs and school needs; develop an understanding of what their basic needs are as they relate to the classroom, to the home, and to the community; have knowledge of work or jobs performed in the home by individual members of the family and themselves." (Nevada) "The student will realize that he and his family depend on the jobs of others to help meet their needs." (Arizona)
STRENGTHENING THE ABILITY TO GET ALONG WITH OTHER BOYS AND RESPECT OTHER PEOPLE. SHOWING HOW TO BE HELPFUL AND DO ONE'S BEST. ENCOURAGING	"Elementary students will differentiate between themselves and others with respect to individual abilities, aptitudes and educational strengths...; identify their role in various situations outside the classroom and family (occupational roles, play-group roles, team roles, organization roles, volunteer worker roles, etc.); recognize and appreciate that the value systems of others although being different, are worthy of consideration, and that often it is the basis for interpersonal relationships; understand that a task or job well done is rewarded by

CUB SCOUT PURPOSES	TYPICAL CAREER EDUCATION GOAL STATEMENTS
GOOD SPORTSMANSHIP AND PRIDE IN GROWING STRONG IN MIND AND BODY.	one's self-satisfaction as well as by recognition from others."(Nevada) "The student will understand that he has responsibilities to himself and others; the student will recognize the implications of working, with and without supervision, independently and with others."(Arizona)
FOSTERING A SENSE OF PERSONAL ACHIEVEMENT BY DEVELOPING NEW INTERESTS AND SKILLS. PROVIDING FUN AND EXCITING NEW THINGS TO DO	(After leaving school, the learner will be) "Equipped with good work habits, competent in the basic academic skills required for adaptability in our rapidly changing society."(USOE) "Develop early a continuing awareness of career opportunities and relate these opportunities to personal aptitudes, interests, and abilities; engage in the career development process by increasing self-knowledge, knowledge of the world of work, and knowledge of the society that affects it; and by accepting responsibility for a series of choices that carry one along the career development continuum."(CA) "Elementary students will: develop an awareness of the different places of employment in the community and the different kinds of work performed there; have skills in recognizing problems, solution formation, identifying logical implications, and testing the solutions by research and application; recognize types of gratification and

CUB SCOUT PURPOSES	TYPICAL CAREER EDUCATION GOAL STATEMENTS
	reward as they relate to decision-making and problem-solving; be aware of some of the skills that are required in the use of tools, equipment, and materials in the world of work." (Nevada) "The student will understand that decision making includes responsible action in identifying alternatives, selecting the alternative most consistent with his goals, and taking steps to implement a course of action; the student will develop the skills required to identify the objectives of a task, specify resources required, outline procedures, perform operations, and evaluate the product; the student will develop an understanding for the value of work and continual learning; the student will understand the role of leisure and the arts in achieving self satisfaction." (Arizona)

It is apparent that considerable overlap exists between the Cub Scout purposes and the goals of career education, especially in the area of awareness of self and others. To summarize: Career education is committed to helping individuals develop a realistic self-concept, with regard to their own needs, values, preferences, and abilities; Cub Scouting shares this commitment. Career education aims at helping students develop the skills they need to get along with others and to become productive members of society; Cub Scouting shares this aim. Career education recognizes the need for students to have a realistic understanding of the qualities important to success; Cub Scouting shares this recognition.

This is not to imply that the career education content of the Cub Scouting program cannot be increased and improved upon. Information on careers and career preparation can be presented in the Cub Scout program. Just as outdoor activities are used to foster understanding of the natural environment, career education activities can be used to foster understanding of the social environment.

For children in the Cub Scout age group, career education is conducted on the awareness level. "This preliminary phase of career development generally emphasizes motivation and work recognition by introducing the learner to a wide range of ideas about occupational roles. Emphasis is usually on developing individual potential based on self-understanding and awareness of vocational possibilities." (McClure, 1975).

Career education content, on the awareness level, should be infused into regular Cub Scout activities in an unobtrusive manner; that is, it should not be an add-on, self-contained, separate program. If leaders become sensitive to career education aspects already inherent in the Cub Scouting program, they will notice many opportunities to emphasize career awareness.

References

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Hoyt, Kenneth B. An Introduction to Career Education. U. S. Department of Health, Education, and Welfare, 1975.

McClure, Larry. Career Education Survival Manual; a Guidebook for Career Educators and Their Friends. Northwest Regional Educational Laboratory. Olympus Publishing Co.; Salt Lake City, Utah; 1975.

Nevada State Department of Education, Career Development in Nevada, 1974.

SECTION TWO

ANALYSIS AND RECOMMENDATIONS

The following analysis of unit level materials points out the career education content already included in Cub Scout literature, indicates which activities are especially career relevant, and recommends attitudes and additional content so that the career awareness potential can be realized.

The WOLF and BEAR materials are discussed first. Because the WEBELOS' age group and special level--between Cub and Boy Scouting--offer opportunity for a slightly more advanced level of career awareness activities, those materials are discussed separately. Finally, the analysis of STAGING DEN AND PACK CEREMONIES is presented. Although this book contains material for Cub and Webelos Scout ceremonies, only those at the Webelos level were found to be structured in such a way that specific additional career education material could be inserted.

The materials are discussed in the following specific order:

I. CUBMASTER'S PACKBOOK

II. DEN LEADER'S BOOK

III. WOLF CUB SCOUT BOOK

- A. Parents' Supplement
- B. Boys' Wolf Book

IV. BEAR CUB SCOUT BOOK

- A. Parents' Supplement
- B. Boys' Bear Book

V. WEBELOS DEN LEADER'S BOOK

VI. WEBELOS SCOUT BOOK

- A. Parents' Supplement
- B. Boys' Webelos Book

VII. STAGING DEN AND PACK CEREMONIES

CUB SCOUT LEVEL

I. CUBMASTER'S PACKBOOK

pp. 68-69; "Parent Talent Survey Sheet":

As stated, Question #3 is likely to be answered "no" by diffident or modest. This could be revised to simply ask "What is your job, business or profession?" Boxes could then be added under the Special Program Assistance section to indicate:

"I would be willing to talk about or demonstrate my job to den members" and "I could arrange for Cub Scouts to visit my place of work."

p. 142; "Program Helps":

The "Program Helps" magazine should include ideas for infusing career education into Cub Scout Activities.

p. 154; "Monthly Themes":

Leaders should be encouraged to give the monthly themes a career education dimension. Add to paragraph four, sentence two: "...skits based on aviation; or learning about jobs in air transportation..."

p. 155:

Add to "The Pack's First Two Months" instructions for infusing career education.

p. 160:

The list of possible summer activities on this page implicitly includes some excellent career education content. A paragraph might be added (before the one on Day-Camping), to say that in planning these trips, leaders and Cub Scouts should discuss the kinds of things they expect to see, and what kinds

of questions they might ask to get the most out of their experience. For instance, on a factory field trip Cub Scouts might ask workers about individual jobs--what they do, how it relates to what the other people in the organization do, how they got into that type of work, and what they like or do not like about it.

p. 208; "Handicrafts":

Crafts projects can also provide an opportunity for career education. A paragraph might be added here, for example:

"MAKE IT MEANINGFUL: Crafts should use skills a Cub Scout can master, but should be challenging and useful enough not to be seen as 'busywork'. One way to increase relevance is to point out in what ways the experience is like an actual job. For instance, while building a chair for the den room, a Cub Scout is using the same kinds of skills, and for some of the same reasons, as a worker in a furniture factory."

p. 247; "Policies and Guideposts":

This is a good place to make a statement on the Cub Scouts' attitude towards career education. For instance, just before Tour Permits, a section titled CAREER EDUCATION might read:

"Just as Cub Scouts must work together to make the pack a success, so must individuals within a community. Part of citizenship is being aware of the diverse and necessary jobs that citizens perform. Beginning to think about careers and why one chooses one or another can contribute to the development of self-awareness as well as to awareness of others. The best way to transfer this kind of information is to infuse it into regular Cub Scout activities. Point out that the skills Cub Scouts are learning relate to jobs. Talk about what jobs have to be done in order to make possible activities the Cub Scouts

enjoy (the lifeguard who watches the pool, the driver of the bus, etc.). Discuss what those jobs are like, how they are acquired, the advantages or disadvantages of each, etc. Give Cub Scouts an opportunity to ask questions."

II. DEN LEADER'S BOOK

Specific recommendations are as follows:

p. 45; #8:

..."his mother's first name, or say what he'd like to be when he grows up."

p. 68; Charades:

..."comic book character, or occupation, and etc..."

p. 79; new paragraph:

"FOR WHEN I GROW UP THEME--WHAT AM I? Prepare a box of name tags with names of jobs written on them. As each boy arrives, pin one to his back. The object of the game is for each boy to figure out which job he has by asking the others questions which can only be answered 'yes' or 'no'."

p. 85; new paragraph after paragraph 4:

"Leaders can also help make crafts more meaningful by pointing out in what ways the things the boys are doing are like things grown-ups do on the job."

p. 96; after paragraph 5:

"Various jobs are also good to pantomime, such as making an ice cream soda, repairing a car, selling door-to-door, etc."

p. 118; after the list of pack activities:

"Summer is an especially good time for learning about jobs and the community because Cub Scouts are free to visit businesses during working hours." A section on field trips to businesses and industries and how to get the most out of them should be added to the National Summertime Pack Award Planning Guide.

III. WOLF CUB SCOUT BOOK

A. Parents' Supplement

Specific recommendations are as follows:

p. 12; Achievement 3:

"...visit a clinic or First Aid Squad." Add: "Spend time talking to personnel there, encourage your son to ask people about their jobs--what they do, how they like it, what training or education is needed to start."

p. 12; Achievement 4; at end add:

"Help your son understand that working both inside and outside of the home are important parts of life. All members of a family can cooperate to keep the household operating, even though parents and children may have additional responsibilities elsewhere. People must learn to care for themselves and others."

p. 13; Achievement 5:

"An interesting additional activity might be to watch a house being built, or visit a furniture or other shop where professionals use these tools."

p. 13; Achievement 7; between paragraphs 3 and 4, or 4 and 5, add:

"Help your son realize that there are many farmers, factory workers, and others involved in and affected by pollution, and that solutions must be found which will still let them make a living. You and your son might also enjoy finding out about the jobs of people who help fight pollution and conserve natural resources."

p. 16; The Wolf Electives; after the introductory section, or at the end of the elective description on p. 20, add:

"Children often like to think about what they will be when they grow up. Your son's understanding of possible career choices and of the world he lives

in can be increased. Talk about careers related to each elective as he does them. Some careers to explore include:

Elective 1: people who teach the deaf, telegraph operators, computer programmers

Elective 2: acting, costume designers, camera operators, sound engineers, producers, stage designers

Elective 3: carpenters, toy and furniture makers

Elective 4: baseball players

Elective 5: boat builders, sailors (navy and merchant marine)

Elective 8: engineers, industrial designers, machine operators

Elective 9: hotel managers, caterers, cruise-ship social directors

Elective 10: fine artists, illustrators, technical or advertising artists, drafting, architects

Elective 13: wildlife managers, game biologists

Elective 14: zoologists, veterinarians, zoo keepers

Elective 15: biologists, farmers, landscape architects, foresters

Elective 16: police officers, fire fighters, civil defense workers

Elective 17: chefs, nutritionists, food service workers

Elective 19: fishing, fisheries managers/workers"

B. Boys' Wolf Book

Specific recommendations are as follows:

p. 1: Increase the career exploration potential of #4 by adding:

"You'll have a chance to find out about all kinds of people and what they do."

p. 30; paragraphs 2 and 3:

Because parental roles are not always clearly divided, it is better to say: "Your parents can help you learn many sports and skills. They can go to ball games with you and fish with you. They can help you with backyard

cooking and camping. They can show you how to do many useful things around the house. They can help you find out about what it would be like to be an astronaut, a truck driver, a chef. Your teacher..."

p. 44; #4; add at end:

"Ask them what they do and how they learned to do it."

p. 48; 1: after first sentence add:

"Find out what jobs have to be done to keep the house going."

p. 50; add after "in your home":

"If you can, watch a house being built, or go to a furniture shop and see how professionals use these tools."

p. 56; add a #6:

"Think of some jobs performed by people in your community that protect the environment. What are they? Why are they important?"

p. 64; add #6:

"There are many jobs in the field of safety (for example: firefighter, police officer). Find out what some of these jobs are and why they are important."

p. 82; after "...to each other," add new paragraph:

"Other people besides the deaf and secret agents use symbols to talk. Do you know that you can talk to a computer? Or with flags to a sailor on a ship? Find someone who uses a symbolic language to communicate. Ask to learn to say 'I am a Cub Scout' in it."

p. 88; add paragraph between second and third paragraphs:

"It takes many different people working together to produce a play, a television or a radio show. Some of the things you will be doing for this elective are similar to what professionals do."

p. 92; add a 4th paragraph to introduction:

"If you can, visit a furniture or toy shop and see how the things you use or see in stores are made."

p. 105; add paragraph 4 to introduction:

"If you live near the ocean or near a lake or river, there may be a boat-building shop in your town. Ask one of your parents to take you there. Talk to the builders about how they make plans for boats and build them."

p. 120; between paragraphs 1 and 2 add:

"Machines are used to build houses, make things we need, produce electricity and other kinds of power, and do many other things. Many people make their livings operating machines."

p. 136; after paragraph 2 add:

"Imagine you are a person who draws pictures for advertisements, posters, book illustrations or cartoons."

p. 136; add #6:

"Talk to an artist and find out about the job. Who does the artist work for? How does one become a professional artist?"

p. 142; add 3rd paragraph to introduction:

"If you want to find out more about birds, ask your parents or teacher to help you contact a biologist, game warden, or someone else whose job involves studying or taking care of wild birds."

p. 148; add 4th paragraph:

"Many people spend much of their time taking care of animals. A veterinarian, a zoologist, a farmer, or a zoo keeper can tell you about animal care."

p. 148; add #4:

"Think of jobs that involve taking care of animals. What do people with those jobs do?"

p. 152; add paragraph 4:

"People who like being outdoors and growing things often get jobs as farmers or gardeners. Landscape architects plan where to grow different plans to make a yard beautiful. Some scientists spend their time growing plants to learn how to make them healthier, bigger, and more beautiful."

p. 152; add #6:

"Name one job that involves growing things and tell what a person with that job would do."

p. 160:

The first sentence is usually, but not always, true. In any case, every person should know how to prepare food properly. A boy will become a better cook if he sees that it is appropriate for men as well as for women to prepare food. Change first sentence to: "Who does most of the cooking in your family? Ask that person to read this with you."

Then, add a paragraph between paragraphs 2 and 3:

"Some people like to cook so much they become chefs, and prepare meals in restaurants or hotels. Others study how to plan healthy and beautiful meals."

p. 160; add #5:

"Next time you eat out with your family, ask to meet the chef. Ask how some food you really liked was prepared."

p. 168; revise the first paragraph to read:

"It is fun for both kids and grown-ups. Grown-ups and kids are equals. The fish does not know who is at the other end of the line."

Then, add to #7:

"Meet somebody who makes his or her living working with fish. What rules does the worker follow?"

IV. BEAR CUB SCOUT BOOK

A. Parents' Supplement

Specific recommendations are as follows:

p. 8, Achievement 1; add underlined:

"...the world around him and the people who help to protect our environment as he completes his various conservation projects."

Achievement 2; add paragraph:

"If a house is being built nearby, go with your son to watch the carpenters and ask what they do."

p. 9, Achievement 6; add underlined:

"...what to cover. Introduce your son to different people whose careers involve exploring our past. Find out what they do and why."

p. 10, Achievement 9; add paragraph:

"Help your son understand the importance of good communication. Talk about the books, newspapers, advertisements and other written materials he sees every day. Who writes them? Why? How can you tell if writing is good or bad?"

Achievement 12; add underlined:

"...he is alone. He will probably be interested in talking to some of the people who do emergency or rescue work. You can help by making arrangements for him to meet them. Telephone your police or fire department and ask to speak to their public relations staff."

p. 12; Elective 1; after "...views such a prospect without the faintest surprise," add:

"He could grow up to be a space explorer. To find out more, write the N.A.S.A. Public Affairs Office (Houston, Texas 77058) and ask what careers in space will exist in the next twenty years and how one might prepare for them."

p. 12, Elective 2; add paragraph:

"To help keep his interest alive, encourage your son to watch the weather report on the news and compare his observations with theirs. If he is interested, telephone the station or a University Department of Meteorology and find out how one becomes a meteorologist."

p. 12, Elective 3; add:

"There are many careers in radio which might interest your son, from building radios to running a radio station. Most towns have at least one local station--try to visit it."

p. 12, Elective 4; add paragraph:

"Electronics is an important industry. Find out if there is a company that makes electric equipment in your area. What local industries use electricity? Consider visiting the local power company and finding out how the electricity is generated and brought to your home."

p. 12, Elective 6; add:

"If he can take a plane trip while working on this elective, arrange for him to visit the pilot's cabin. You might also visit an airport and find out what the people who work in the control tower and on the maintenance crews do."

p. 13, Elective 11; add paragraph:

"Most towns have professional photographers. See if your son can visit one. Or find out who takes the pictures one sees in magazines, TV, movies, or the local newspaper. If your son is interested, talk with him about how photographers work and what they do."

p. 15, Elective 19; add paragraph:

"As in Achievement 1, your son may be interested in finding out about people who spend all their time in Conservation, such as forest rangers, agronomists, water treatment plant operators, etc."

B. Boys' Bear Book

Specific recommendations are as follows:

p. 10, Achievement 1:

Requirement #3 is already career education oriented.

p. 15, Achievement 2; add:

"4. Watch a professional carpenter or other wood worker and describe the job."

p. 33, Achievement 6; add:

"7. Think of jobs that involve taking care of historical places or things, or finding out about history. Describe them."

p. 56, Achievement 9; add:

"g. Find out who wrote a book, an article or other piece of published writing. Find out if the writer works for a company or is self-employed. If the writer lives in your town, arrange to meet and talk about the writer's job."

p. 70, Achievement 12; add:

"6. Choose a kind of emergency and tell whom you would call for help. Find out what kind of training that person has to have to help you."

p. 81, Elective 1; add:

"7. Ask your parents to help you write to the N.A.S.A. Public Affairs Office (Houston, Texas 77058), to ask what kinds of jobs in space there will be in the next twenty years. Ask what you should do to prepare for a career in space."

p. 85, Elective 2; add:

"7. Watch the weather report on TV on the days for which you are keeping records and compare their findings with yours. Find out how you can become a meteorologist and what one does."

p. 90, Elective 3; add:

"Optional 3. With an adult, visit a local radio station and find out how programs are recorded and transmitted. What kinds of jobs are there in radio?"

p. 94, Elective 4; add:

"6. Visit your local power station and find out where the electricity used by your town comes from and how it is sent. What do people at the power company do?"

p. 102, Elective 6; add:

"5. Visit an airport and find out how people there help airplanes fly safely. If you take a plane trip, ask if you can visit the pilot's cabin."

p. 123, Elective 11; add:

"5. Visit a professional photographer and examine the photographic equipment, or find out who takes the pictures for your local newspaper and interview the photographer."

p. 160, Elective 19; add:

"5. If you live in an area where there are farms, try to meet the local Agricultural Extension Agent or other professional involved in Soil Conservation. In the city, talk to someone in a University Department of Geology and ask about different ways of preserving the soil. With an adult, visit a water treatment plant and find out how water is made safe to drink."

WEBELOS SCOUT LEVEL

The Webelos Activity Badges, as their titles imply, are already career education oriented. As does career education they focus on developing an integrated body of skills and knowledge. Webelos activities differ from Cub Scout activities in that they do not rely on interest areas which may or may not have career implications.

Webelos Activity Badges include careers which could be placed in eight of the U.S. Office of Career Education's fifteen major career clusters.*

Activity Badge	Career Cluster
Aquanaut	Marine Science
Athlete	Hospitality and Recreation
Artist Scholar	Fine Arts and Humanities
Showman	Communications and Media
Citizen	Public Services
Craftsman Engineer	Manufacturing/Construction
Forester Geologist Naturalist Outdoorsman Scientist	Environmental Control
Traveller	Transportation
	Business and Office
Not represented	Marketing and Distribution
	Consumer and Homemaker
	Personal Services
	Health

*See the Appendix for the fifteen career clusters and a sampling of jobs in each.

If the Webelos program is expanded or revised, the possibility of including careers from some of the other clusters should be considered. Jobs should be chosen which are interesting, include some skills or activities which can be attained or simulated by a ten year old boy, and which represent the wide variety of career choices that are available.

Possibilities include:

Accountant (Business and Office)
Merchant or Trader (Marketing/Distribution)
Farmer (Agribusiness)
Interior Designer (Consumer, Homemaking)
Barber (Personal Services)
Paramedic (Health)

V. WEBELOS DEN LEADER'S BOOK

Specific recommendations are as follows:

p. 44, paragraph 2; add underlined:

"...overnight camp. (Visits to businesses, etc. can help Scouts fulfill requirements for Activity Badges). Show these in the monthly..."

p. 82, paragraph 2; change to:

"People usually like to talk about leisure time and career interests. Many would be pleased to demonstrate their skills to boys."

p. 112, Who Am I?; add underlined:

"...famous person (...etc), or job title, on each piece of paper."

VI. WEBELOS SCOUT BOOK

A. Parents' Supplement

Specific recommendations are as follows:

p. 4, With His Activity Badge Work; add paragraph:

"The Activity Badges focus on different career areas. Your son's Den Leader will be looking for ways to help the boys find out more about jobs available in the areas covered. When you fill out the Parent Survey sheet, be sure to indicate what your job is. Also, though you may not work in one of the areas covered, you may know someone who does. Help that person get together with the Scouts. Most boys spend some time wondering what they will be when they grow up. The Activity Badge work gives them an opportunity to learn about various job possibilities.

B. Boys' Webelos Book

Specific recommendations are as follows:

p. 12; add underlined to paragraph 4:

"...and done well. You may also meet people who make their living doing the things you are learning to do."

p. 16; add 4th paragraph:

"There are many interesting jobs for people who like the water. You will probably meet some of them in learning to pass the tests for this badge. Aquanauts teach swimming or work as lifesavers, serve in the Coast Guard or Harbor Rescue Service, or fish or use snorkel and SCUBA equipment to explore the ocean. If possible, talk to someone who earns a living on or in the water. Ask what the job is all about. How does one prepare for this job?"

p. 31; add to requirements:

Talk to one person whose job is on or in the water, and be able to explain what the job is and how one learns to do it.

p. 51; add at beginning of paragraph 2:

"Some people find careers helping people be physically fit. School physical education teachers, recreation directors, and people at organizations like the Y.M.C.A. do this."

These pages present an adequate introduction to public service careers as they stand. However, one might add the following at the end of p. 75:

"People who want to help others often go into public service. They may work for the local, state, or federal government. They do many different jobs including making laws, seeing that laws are obeyed, and protecting people in various ways. As a part of this activity, arrange to talk to a government worker. Find out what this person's job is, and how it helps people."

p. 81; add paragraph:

"In some towns there are people who make their living doing crafts. They may have started by doing it for a hobby, just like you. If you can, talk to a professional craftsworker. Ask if you can watch the work in progress and see how the necessary tools are handled. Talk about where designs come from, and how people learn crafts."

p. 109; add paragraph:

"If you are interested you can arrange to meet a forester and talk about forestry. Or you might write to the U.S. Forest Service for information about how to become a forester.

p. 137; add to paragraph 3:

"You will learn about some of the people who spend their lives studying nature."

p. 138 and 150; add requirement:

"Find out about someone who is, or was, a naturalist. Describe what a naturalist does."

p. 138; add paragraph at top of page:

"There have been many great naturalists whose work added to our understanding of nature. Are there any working naturalists in your town? The zoo, a University department of Zoology or Biology, or a large park would be good places to look for one."

p. 151; add paragraph:

"Everyone should know how to be safe outdoors. Some people use these skills every day. Forest rangers have to know how to live in the woods and take care of the forest. Park rangers advise campers in outdoor living practices. Other people who work outdoors may be guides."

p. 178, 186, 187: material on these pages is career education oriented already, and no additions to this Activity are needed.

p. 188, after paragraph 1; add:

"Scientists also seek knowledge in many other fields. To be a scientist, you need to know how to test ideas, and you need to learn basic information about what you are studying. For this activity, you will find out more about what some scientists do."

p. 190, 211; add requirement:

"Name one kind of scientist and tell what that scientist does."

p. 212; add to paragraph 2:

"If you went into show business, what would you like to do? Why? Can you name anyone in that field?"

p. 230; add to paragraph 2:

"Some become professionals, and make their living in sports."

p. 231 (bottom) and p. 248 (top); add requirement:

"Name one professional athlete and tell how that athlete got to be a pro. Name two non-playing jobs in sports."

p. 265; add paragraph:

"Would you like to do a lot of traveling when you grow up? Some people have jobs that let them do this. Travel agents are experts in arranging trips. Visit one and ask how travel agenets help people travel. Ask what kind of people travel a lot."

p. 252, 266; add requirement:

"Visit a travel agent and find out what a travel agent does."

VII. STAGING DEN AND PACK CEREMONIES

The ceremonies described in this book are connected to program activities presented in other Cub Scout literature. The content of the ceremonies, therefore, is determined by those activities, and cannot be changed unless the activities themselves are changed. As career education content is added to other Cub Scout materials, the need for revision of the appropriate ceremonies should be considered.

The bulk of the book, then, does not lend itself to the addition of career education content. There are, however, specific ceremonies--all for Webelos Scouts--which already contain good career education messages or the potential for them. In most cases, the insertion of a sentence or two will contribute to the Webelos Scout's awareness of career possibilities and how his present Scouting activities relate to them.

Specific recommendations are as follows:

p. 117; top paragraph:

"...learning things that may lead the boys to lifelong hobbies or vocations." Good as is.

p. 118, bottom; and p. 119, top:

"...activity badges you earn as you explore with us some of the 15 Webelos activity areas we will work on."

ADD: "You may find some activity you like well enough to continue working in all your life, either as a hobby or perhaps even as a job."

p. 120, bottom paragraph:

"...is an opportunity for a ceremony involving an outside expert in the subject. Take this opportunity, if possible, because it will lead to variety in your ceremonies."

ADD: "It will also give you the chance to introduce the Webelos Scouts to professional people in an area in which the boys now have some basic skills. Encourage your guest experts to discuss their careers with the boys."

p. 121, Engineer speaking:

"...if any of you decide to become real engineers." Good as is; perhaps also ADD: "There are many different jobs where you can use your engineering ability." (If possible, the engineer might give one or two examples related to the projects done by the boys.)

Same page, Engineer speaking: "That's excellent! I'm proud to see that you have learned engineering principles so well."

Add: "I will stay here after the meeting to answer questions about my job or about other jobs where such engineering principles are used."

p. 122, Webelos Den Leader speaking; top paragraph:

Change: "...hope you will stay afterward so our budding engineers can talk with you." To: "...glad you can..."

p. 123, Artist; top paragraph:

"You have shown real skill in meeting the requirements for the Artist badge."

Add: "Some of you may be interested in becoming professional artists when you grow up. If you would like to know what a (name specific profession, such as cartoonist or art teacher) does, I'll be here after the meeting to answer your questions. Even if art does not become your career, I hope all of you enjoy creating artwork all your lives. Right now, it is a great pleasure..."

Den Leader, last sentence; change to:

"...I'm glad you can stay after the meeting to talk with our Webelos Scouts and their parents about art."

p. 124, general note:

When a variety of activity badges are earned, it would still be a good idea to invite professionals in the various areas to present the awards. Statements similar to the ones listed above could be included in the presentation. The professionals could all be encouraged to stay after the meeting to discuss their area with the Webelos Scouts.

If that is too cumbersome, a statement could be inserted at the end of the third paragraph on this page, after: "(Hands badges to parents while Den Chief lights third candle.)

Add: "You have all learned skills which you can use now, and which may help you pick a career someday."

p. 219, Conservation:

Having a forester or conservation officer present the awards is good. Also, having the guest "briefly tell about his job and items of special interest pertaining to conservation," is good.

APPENDIX

THE FIFTEEN OCCUPATIONAL CLUSTERS OF THE U.S. OFFICE OF EDUCATION AND A SAMPLING OF JOBS IN EACH

The fifteen occupational clusters represent the entire world of work around which career education might be developed, as suggested by the United States Office of Education.

THE FIFTEEN OCCUPATIONAL CLUSTERS OF THE U.S. OFFICE OF EDUCATION AND A SAMPLING OF JOBS IN EACH

1. Agri-Business & Natural Resources

Cruiser (Forestry)
Hatchery Worker (Fishery)
Sanitary Engineer
Range Manger
Campground Caretaker
Fish & Game Warden
Forest Fire Guard
Dairy Tester
Nursery Worker
Produce Grower

2. Business & Office

Accountant
Computer Programmer
General Office Clerk
Typist
Office Manager
Stenographer
Bookkeeper
Receptionist
Stock Clerk
Estimator

3. Communications & Media

Communications Engineer
Sound Technician
Newspaper Reporter
Radio Operator
Air Traffic Control Specialist
Radio-TV Announcer
Offset Press Worker

4. Construction

Heavy Equipment Operator
Carpenter
Electrician
Bricklayer - Stonemason
Insulation Worker
Ironworker
Painter
Plumber - Pipe Fitter
Dry-wall Installer
Glazier

5. Health

Dental Hygienist
Optician
Hospital Administrator
Nurse - Licensed Practical
Psychiatric Aide
Surgical Technician
Orthopedic Cast Specialist
Nuclear Medical Technologist
Dietician
Sanitarian

6. Environment

Soil Conservationist
Industrial Waste Inspector
Water Treatment Plant Operator
Forest Fire Fighter
Air Control Specialist
Air Analyst
Smoke Tester
Industrial Health Engineer

7. Fine Arts and Humanities

Museum Technician
Journalist - Author
Librarian - Historian
Minister - Philosopher
Teacher
Urban Planner
Lawyer - Judge
Anthropologist
Piano Tuner
Musician - Artist

8. Homemaking and Consumer Education

Home Economist
Budget Consultant
Child Care Assistant
Salesperson (Textiles)
Salesperson (Children's toys)
Interior Decorator
Dressmaker - Tailor
Foster Parent
Food Service Representative
Home Service Representative

9. Hospitality & Recreation

Hunting & Fishing Guide
Playground Supervisor
Park Ranger
Hobby/Sport Shop-Employee/owner
Recreation Facility Attendant
Recreational Therapist
Host/Hostess - Restaurant
Travel Counselor
Sports Instructor
Community Center Director

10. Manufacturing

Machinist
Assembler
Manufacturer's Service Representative
Automated Equipment Engineer-Technician
Sheetmetal Worker
Research Mechanic
Tool & Die Maker
Machine Operator
Director, Quality Control
Marketing Researcher

11. Marine Science

Chemical Oceanographer
Marine Photographer
Marine Biologist
Oceanographic Engineer
Marine Meterologist
Diver's Helper
Ocean Floor Cartographer
Laboratory Assistant
Researcher
Fish Hatchery Superintendent

12. Marketing & Distribution

Wholesaler
Buyer
Salesperson
Fashion Coordinator
Service Center Manager
Manager - Restaurant
Manager - Hotel
Warehouse Worker
Driver - Salesperson

13. Personal Services

Make-up Specialist
Cosmetologist
Haircutter
Housekeeper - Home
Waiter/Waitress
Bell Captain
Hospital Attendant
Dry Cleaning & Laundry Worker
Reducing Salon Attendant
Embalmer

14. Public Services

Highway Patrol Officer
Bailiff
Fire Fighter
City Manager
Public Utility - Customer Service Representative
Mail Carrier
Meter Reader
Social Worker
Employment Interviewer
Building Inspector

15. Transportation

Traffic, Rate, & Transportation Clerks
Heavy-Truck Driver
Ticket Agent
Pilot, Engineer, Bus Driver, Ship Captain
Warehouse Traffic Director
Railway Express Agent
Crating & Moving Estimator
Port Traffic Manager
Automobile Mechanic
Schedule Analyst

STUDY REPORT

Career Education Content in Unit Level Materials* of the SCOUTING DIVISION of SCOUTING/USA

ANALYSIS AND RECOMMENDATIONS

*Unit Level Materials

I. SCOUTMASTER'S HANDBOOK
II. TROOP COMMITTEE GUIDEBOOK
III. SCOUT HANDBOOK
IV. MERIT BADGE PAMPHLETS

Bela H. Banathy
Dru Robinson
Diana Studebaker
Celia Chesluk
David Stein

Prepared for SCOUTING/USA
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Instructional and Training Systems Program
FAR WEST LABORATORY FOR EDUCATIONAL RESEARCH AND DEVELOPMENT
1855 Folsom Street, San Francisco, California 94103

DO NOT FILM THIS PAGE

The purpose of this study report is to present an analysis of career education content in unit level materials of the Scouting Division of SCOUTING/USA. Findings of this examination are twofold: first, that many crucial elements of career education are already contained in the Scouting program; and second, that opportunities for further infusion of career education content are numerous.

The Scouting purpose--to aid youth in developing good character, citizenship, and fitness--is compatible with the goals of career education. This consonance makes infusion of career education content into Scouting materials a logical course to follow.

This report notes career education content in Scouting materials, indicates opportunities for further development, and recommends additions.

ANALYSIS AND RECOMMENDATIONS

I. SCOUTMASTER'S HANDBOOK

Scout leaders who are alert to career education goals will find many opportunities to make appropriate additions to the program themselves. However, they should also be provided with career education materials and activity ideas, such as the following guidelines for infusing career education into any trip plans. This information could be added to the handbook where appropriate.

"Group outings can be a way of learning about careers. Before you go, tell the boys to be aware of the various jobs done by people they might meet along the way. Ask them to help you think of questions to ask those people to

find out more about their jobs. Let them come up with as many questions as possible, but have in mind such questions as:

How did you decide to do this kind of work?

How did you get this job specifically?

What work did you do before this job? Does your previous work help you now?

What are your hours?

Do you work indoors or outdoors?

Do you work mostly with people or mostly alone?

What do you like about your job?

What do you dislike about your job?

What kind of person do you think would like your job?

What kinds of skills are needed for your job?

(The Scouts will probably come up with a question about pay, which is certainly a good thing to know about a job. However, point out to them that asking about salary is considered by some to be an invasion of privacy, and probably shouldn't be done.)

On the trip, speak with such people as the bus driver, the gasoline station attendant, the lifeguard, the tour guide, or the ticket taker at the park entrance. Think of every worker along the way as a candidate for interview. (Don't overlook yourself. This might be a good way to let the Scouts know about your life outside of Scouting. It is also an opportunity to talk about jobs in Scouting, both voluntary and professional.) Ask the workers if they would be willing to answer some questions about their jobs in front of the Scouts.

In this process, Scouts will see people in their roles as workers."

Scoutmasters might also be given a small collection of anecdotes about adults who became interested in their careers as a result of some Scout activity. The more famous the adults, the better.

Specific recommendations for other additions to the HANDBOOK are as follows:

p. 30:

Recognizing people's interdependence is a basic part of career awareness.

p. 31:

Understanding American social, economic, and governmental systems is a basic career awareness goal, and exploring vocational and hobby possibilities is part of career exploration.

p. 39; #6(d):

This analogy should be emphasized. It will help boys realize the relevance of what they are doing now to what they will do as adults.

p. 42:

A section could be added here, titled "Career Education," as follows: "Another program element in Scouting is career education. This should not be confused with vocational or job training. Career education is a broader process. It includes not only information about specific careers, but a basic understanding of why people have careers, and how everyone in a community contributes (through jobs and other activities) to meeting the community's needs.

The Skill Award and Merit Badge activities include many opportunities to gather information on what various jobs are like, and whether they would suit individual interests and abilities, which will help Scouts make wise career

choices when the time comes. As Scoutmaster, you should be aware of the potential of parents of troop members and others in the community as resources in various career areas.

Career education is particularly relevant to the underlying purposes of Scouting in developing citizenship and leadership skills. If one understands the nature and importance of a variety of jobs to the success of a community, one's ability to relate positively to other members of that community is increased. The boy who has learned leadership skills in Scouting may be more likely to take responsibility and achieve a position of leadership in his future career."

p. 57:

"A mental characteristic of the 14-year-old or older is given as 'begins to think about vocations.' This is the time to begin emphasizing specific information about careers, and to give boys opportunities to observe or talk to working people."

p. 129; add to paragraph 2:

"However, the troop committee is an excellent source of information and contacts, particularly when it comes to finding people in different career areas in which a boy may be earning a merit badge. If the job is not represented within the committee, it may be among troop parents or friends."

p. 181; add to last paragraph the underlined:

"...adult interests, either in terms of career or leisure activities."

p. 183; paragraphs 5, 6, and 7:

A number of good career education learning activities are included here.

p. 187; Advancement Requirements:

Revise these as indicated for the equivalent pages in the Scout Handbook.

p. 298; Nature Questions:

This game can be adapted to Career Education by calling it "Who am I?" and having "It" think of a job instead of a natural object.

II. TROOP COMMITTEE GUIDEBOOK

Specific recommendations are as follows:

p. 12:

A career education responsibility area might be a good addition. It could be described right after Advancement, as follows:

"A committee member discusses career areas which will be touched on by individuals working on awards or badges or by the troop as a whole. Ways to provide information on these areas, such as asking experts to come to a troop meeting and speak, arranging visits to businesses, industries, etc., or even setting up internship experiences, are suggested."

p. 20; paragraph 3:

The recruitment of merit badge counselors could be one of the tasks of the career education committee member as described above. People qualified to provide career education experiences might also serve as a source of counselors.

p. 41:

Defined purposes of the merit badge program include provision of: "Opportunities for Scouts to learn about a wide variety of subjects including Scout skills and vocational, avocational, cultural, and service fields." This emphasizes the career education aspect of badge work.

p. 42; add to paragraph 1:

"Especially in the more career-oriented merit badges, the counselor serves as a career model."

p. 64; Recruiting Merit Badge Counselors, last paragraph:

"It is a program of learning skills or hobbies." Add: "It is also an opportunity for the Scout to meet an adult who is proficient in the skills presented, and who may use them either professionally or as a leisure activity."

III. SCOUT HANDBOOK

Because of his greater sophistication and mobility, the boy of Scout age can explore careers more independently than can a Cub Scout. He does need guidance, however, to get the most out of his opportunities.

Specific recommendations are as follows:

Skill Awards:

Citizenship

Requirement 4a:

Good example of a career education activity.

p. 112; add to the list:

"People who run city services."

p. 113; add a paragraph between paragraphs 1 and 2:

"Think of questions you would like to ask, for example: Is your community service a paid or volunteer job? What kinds of skills or knowledge do you need to do it? Where did you get them? Why do you think community service is important?"

First Aid

Fulfilling requirement #1 will involve finding out about medical careers.

p. 123; add after "...sheriff's office":

"As part of their jobs, all these people are trained to provide first aid."

Family Living

p. 150; add after paragraph 2:

"Long ago, family jobs and people's careers were one and the same. People raised their own food, made their own clothes, and built their own homes. Today parents may work at jobs which seem to have little relationship to the family. But a career is still an important part of one's life. Family members can help each other by being interested in what each member does."

p. 157; add to paragraph 3:

"...in requirement 4. What are their jobs called? What do they do?"

p. 160:

The analogy between family and business finances is good.

Community Living

p. 165; add to requirement 3 between first and second sentences:

"Find out about one job in each of these service areas and describe what it involves and how one prepares for it."

Add a requirement 5:

"List several services that people in a community need."

The information on pp. 166-172 provides quite a bit of career education.

p. 174; add to paragraph 3:

"...public utility. Talk to people who work in these places and ask them what they do, how they like it, and what training they needed to get their jobs. Afterward, tell..."

Communications

p. 177; add a requirement:

"7. Name four ways in which people get information dispersed, and give the job title of one person who makes a living in each."

p. 185; add paragraph:

"If you need help placing a call, the telephone operator will help you."

p. 188; add paragraph:

"Who writes or prepares these stories? How do they go about it, and where do they get their information? What other people are involved in getting the story to the public, and what do they do?"

Environment

p. 275; add to requirement 4:

"Name two jobs in which people study the environment. Tell what they do and how they do it."

p. 279; add paragraph:

"Many people spend their lives studying these laws. Biologists and zoologists study plants and animals. Agronomists study the effects of different farming techniques. Marine biologists study the sea."

Conservation

p. 307; add a requirement:

"5. Tell what each of the following people do: waste-water treatment plant operators; environmental inspectors; soil scientists."

p. 312; add:

"Environmental inspectors monitor the level of pollution in the air and, if it grows too dangerous, must issue a smog alert."

p. 316; add to paragraph 3:

"Soil scientists study the earth and can suggest to farmers ways to add or return nutrients to the soil."

IV. MERIT BADGE PAMPHLETS

The analysis and recommendations are presented in two sections,* the first of which is described below:

SECTION A: The career education content and recommendations are presented in chart form.

The first column gives a code number (which will be used for reference in SECTION B); the title of the pamphlet; and the date of the last revision. The revision date is very important to the value of the pamphlet as a career education resource, since information in many fields is rapidly out-dated. Each pamphlet should be reviewed by experts in the career area to determine revision requirements. However, it is probably reasonable to assume that any pamphlet over ten years old is not useful in a career education program.

The second column contains a summary of the pamphlet contents. While all of the pamphlets can be considered career relevant, some have sections specifically geared to career development. Statements regarding specific career education content have been underlined.

The third column indicates existing requirements which are most directly related to careers. It was found that most of those requirements were added as a result of recommendations made by the Program Development Division of SCOUTING/USA ("Career Exploration Requirements in the Merit Badge Plan," 11/15/72).

The fourth column contains sample requirements which would increase the career education emphasis of the merit badge program. Additions were made to the most career relevant pamphlets. However, this is not to imply that all of these additions should be made nor that additions to other pamphlets should not be made.

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*Section B begins on page 28.

SECTION A

MERIT BADGE PAMPHLETS

CAREER EDUCATION ANALYSIS

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MERIT BADGE PAMPHLETS
CAREER EDUCATION CONTENT

CODE # TITLE REVISION DATE	CONTENT SUMMARY (Career education emphasis underlined)	RELEVANT REQUIREMENTS	
		Existing	Sample Additions
002 American Business 1975	Presents the industrial revolution, humans as tool users, three types of businesses, the profit motive, private property and contacts, credit and banking, money and inflation, insurance, the stock market, labor unions, business and government, and owning your own business.	All	2. (f) Give job titles and describe what three different bank employees do.
003 American Heritage 1976	Discusses history of U. S.; including notes on speeches historical sites, and events.	2. (a) 5. (b)	6. Name three careers in which people study history. Tell how these people help us understand our heritage.
004 Animal Science 1975	Discusses diseases and characteristics of farm animals and raising techniques. Includes a section on careers in livestock production.	5.	
005 Archery 1964	Presents safety, care and use of archery equipment.		
006 Architecture 1966	Provides information on basic architecture skills. Includes a section on what an architect does.		5. Talk to an architect and find out how architects train for their work.
007 Art 1968	Presents different types of art, what it is, how it is used to communicate, reproduction of art and a brief presentation on jobs in art.	7.	
008 Astronomy 1971	Introduces basic astronomy: the sun, moon, stars, planets, and viewing the heavens. Includes a section on careers and career preparation.	9.	

MERIT BADGE PAMPHLETS
CAREER EDUCATION CONTENT

CODE # TITLE REVISION DATE	CONTENT SUMMARY (Career education emphasis underlined)	RELEVANT REQUIREMENTS	
		Existing	Sample Additions
009 Athletics 1964	Focuses on amateur sports: following rules of games and developing individual athletic ability.	3.	
010 Atomic Energy 1965	Discusses what atomic energy is, some of the equipment that is used, some important people in the field and careers in atomic energy.	4.	6. (k). Talk to someone who works with radioactive materials. Find out about their job. How do they guard against exposure to radiation?
011 Aviation 1968	Introduces basic theories of flying, airplane design, the areospace age, safety, and careers in aviation.	9. (h).	9. (c). Describe the duties of one person who is responsible for air safety.
012 Basketry 1968	Demonstrates basket weaving.		
013 Beekeeping 1957	Discusses the value of bees and their social structure; how to keep and manage bees.		
014 Bird Study 1967	Demonstrates how to identify birds by sound and sight; discusses migration, bird watching techniques, extinct and rare birds.	6. (e).	
015 Bookbinding 1968	Demonstrates bookbinding; contains a short section on careers.	4.	

MERIT BADGE PAMPHLETS
CAREER EDUCATION CONTENT

CODE # TITLE REVISION DATE	CONTENT SUMMARY (Career education emphasis underlined)	RELEVANT REQUIREMENTS	
		Existing	Sample Additions
016 Botany 1964	Discusses field observation, plant identification, plant collection, and the importance of light, heat, water, oxygen, and carbon dioxide. Includes a section on careers.		9. Describe two possible careers in Botany.
017 Bugling	(In Music merit badge pamphlet #069.)		
018 Camping 1974	Introduces basic camping skills: first aid, what to pack, equipment, meals, and how to make camp.		
019 Canoeing 1968	Introduces canoeing skills: boarding, paddling, launching, lifesaving with a canoe, storing a canoe.		
020 Chemistry 1973	Discusses combustion; importance of water; chemistry of plants, animals, foods, and metals; how to analyze chemicals; pollution; and industrial and agricultural chemistry. Includes a section on careers in chemistry related fields.	9.	
021 Citizenship in the Community 1972	Discusses the individual's role as a citizen, organization of government, volunteer organizations, and water resources. Mentions careers in public service.	2. 5. (a). 5. (c). 8. 9. (b).	
022 Citizenship in the Nation 1972	Discusses personal responsibility, Declaration of Independence, Bill of Rights, Constitution, national problems, how government works and what services it provides, naturalization.	7. 8. 9.	

MERIT BADGE PAMPHLETS

CAREER EDUCATION CONTENT

CODE # TITLE REVISION DATE	CONTENT SUMMARY (Career education emphasis underlined)	RELEVANT REQUIREMENTS	
		Existing	Sample Additions
023 Citizenship in the World 1972	Discusses world problems, different ideologies, international relations and organizations, world resources and world brotherhood.		9. (g). Name and describe the careers of three people who promote or have promoted world peace and understanding.
024 Coin Collecting 1975	Demonstrates identification, collection, and care of coins.		
025 Communications 1973	Discusses selling, verbal communication, writing a resume and planning an activity that involves communication. Emphasizes that communication is important in many fields and lists several specific ones.	7. 8.	
026 Computers 1973	Introduces the history of components, flow charts, computer systems, and includes a section on careers in computers and related fields.	7.	
027 Consumer Buying 1975	Discusses foods, product price and value comparison, advertising, and consumer protection.	5. 6.	
028 Cooking 1967	Discusses menu and food preparation, clean up, food packaging and storage.		
029 Cycling 1971	Presents bicycle care and safety; discusses development of individual ability on 6 to 150 mile trips.		

MERIT BADGE PAMPHLETS
CAREER EDUCATION CONTENT

CODE # TITLE REVISION DATE	CONTENT SUMMARY (Career education emphasis underlined)	RELEVANT REQUIREMENTS	
		Existing	Sample Additions
030 Dairying 1950	Discusses breeds of cows, milking cows and dairy management.		
031 Dentistry 1975	Presents dental problems and correction strategies with projects related to dental care. Includes a section on careers in dentistry.	7.	
032 Dog Care 1972	Demonstrates how to train and care for dogs. Veterinarian suggested as a related career.	8.	
033 Drafting 1965	Introduces the language and tools of drafting, sketching and drawing. Contains a section on careers.		4. Name three kinds of businesses that need people with drafting skills. What do these people do?
034 Electricity 1974	Introduces basic principles of electricity. Discusses alternating and direct currents, how a battery works, safety, terms to know, and apprenticeship programs in electricity.		12. Visit a power company and find out what jobs have to be done in order to deliver electricity to your home.
035 Electronics 1965	Demonstrates how to read, design and set up a simple circuit; explains the binary system and demonstrates how to build a flip flop circuit. Discusses jobs in the field of electronics.	5.	
036 Emergency Preparedness 1972	Demonstrates proper conduct in emergencies, how to signal for help, home preparedness, and rope work.		

MERIT BADGE PAMPHLETS

CAREER EDUCATION CONTENT

CODE # TITLE REVISION DATE	CONTENT SUMMARY (Career education emphasis underlined)	RELEVANT REQUIREMENTS	
		Existing	Sample Additions
037 Engineering 1968	Focuses on careers in engineering: what skills, knowledge, and attitudes are needed and what training is required to enter the field.	1. 2. 3.	
038 Environmental Science 1972	Introduces environmental science and presents a section on career opportunities.	9.	
039 Farm Arrangements 1961	Introduces land utilization and farming.		2. Name and describe the functions of two people a farmer might ask to help rearrange the farm's facilities.
040 Farm Mechanics 1958	Demonstrates operation and maintenance of farm equipment.	6.	
041 Farm Records 1955	Introduces bookkeeping and farm management strategies.		7. What job belongs to a person who is able to teach farmers record keeping.
042 Finger-printing 1964	Demonstrates fingerprinting, identification of fingerprints, and the history of fingerprinting.		6. Name and describe three jobs in which fingerprinting is used.
043 Firemanship 1968	Discusses fire causes and prevention; conduct in dangerous situations; home and camp escape plans and the role of the fire department.		6. (a) Name and describe the duties of fire station personnel. Cont'd.

MERIT BADGE PAMPHLETS
CAREER EDUCATION CONTENT

CODE # TITLE REVISION DATE	CONTENT SUMMARY (Career education emphasis underlined)	RELEVANT REQUIREMENTS	
		Existing	Sample Additions
043 Firemanship 1968	(continued from previous page)		7. (g) Describe the personnel and procedures which the Forest Service employs to control forest fires.
044 First Aid 1972	Demonstrates basic first aid including treatment of bleeding and broken bones.		
045 Fish and Wildlife Management 1972	Discusses the relationship between people and wildlife and agencies that manage wildlife. Suggests where to write for career information.	5. (b) 5. (d)	
046 Fishing 1974	Demonstrates how to identify, catch, clean, and prepare fish. Presents fishing regulations.	4.	
047 Forestry 1971	Discusses identification and measurement of trees, forestry projects, and problems. The career of forest manager is presented.	8.	
048 Gardening 1971	Introduces home gardening techniques and dfscusses the food value of vegetables and fruits.		
049 Genealogy 1973	Demonstrates how to trace a family genealogy.		

MERIT BADGE PAMPHLETS

CAREER EDUCATION CONTENT

CODE # TITLE REVISION DATE	CONTENT SUMMARY (Career education emphasis underlined)	RELEVANT REQUIREMENTS	
		Existing	Sample Additions
050 General Science 1972	Introduces general science principles, space science, environmental science, biology, physics, and chemistry. Discusses careers in science and related fields.		5. Name five different careers in Science.
051 Geology 1953	Introduces earth science, earth history, natural formations, rock types, and minerals. Includes a section titled: "Why be a geologist."		4. (d) Name one company which employs geologists and tell what they do.
052 Hiking 1962	Discusses how to prepare for and conduct hikes.		
053 Home Repairs 1961	Demonstrates how to make basic home repairs.		
054 Horsemanship 1974	Discusses breeds of horses, anatomy of horses, preparation to ride, riding techniques, horses' care and common diseases.		
055 Indian Lore 1959	Discusses various tribes: their customs, games, dances, and sign, as well as verbal, languages.		
056 Insect Life 1973	Introduces insect collection, identification, and display. Discusses their social structure and their role in the ecosystem.		12. Describe three jobs that involve working with or studying insects.
057 Journalism 1962	Discusses reporting, page layout and career opportunities.	2. 4.	

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MERIT BADGE PAMPHLETS

CAREER EDUCATION CONTENT

CODE # TITLE REVISION DATE	CONTENT SUMMARY (Career education emphasis underlined)	RELEVANT REQUIREMENTS	
		Existing	Sample Additions
058 Landscape Architecture 1969	Introduces principles of landscape design, plant identification, effects of soil and climate, growth habits of plants, and reading topographic maps. Includes a section on careers in landscape architecture and related fields.	1. 6.	
059 Law 1975	Introduces general law history, civil and criminal law, law enforcement, and explains how to become a lawyer, judge or participate in related fields.	4. 7. 8.	
060 Leatherwork 1970	Demonstrates braiding, tanning, and repairing leather. Includes a section on jobs in leather work.	4. (f)	
061 Lifesaving 1965	Demonstrates rescue and first aid techniques useful in water emergencies.		
062 Machinery 1956	Demonstrates identification and use of various tools. Includes a section on machine related occupations.	6.	
063 Mammals 1972	Introduces identification, observation, photography of mammals, and discusses their life needs.		6. Describe what a zoologist or biologist does and how one trains for the job.
064 Masonry 1952	Demonstrates uses of concrete, cement, plaster, and stucco. Discusses the history of bricklaying and career opportunities.	3. (g)	
065 Metals Engineeering 1972	Discusses the history of metallurgy, rock collecting, metals in the home, use of metals, properties of metals, metal fabrication, and careers in metallurgy.		2. Add: and explain how metallurgists can contribute to our knowledge.

MERIT BADGE PAMPHLETS

CAREER EDUCATION CONTENT

CODE # TITLE REVISION DATE	CONTENT SUMMARY (Career education emphasis underlined)	RELEVANT REQUIREMENTS	
		Existing	Sample Additions
066 Metal Work 1969	Demonstrates several small projects in metal work.		
067 Model Design and Building 1964	Introduces design and construction of scale models.		
068 Motorboating 1962	Discusses safety rules, care, operation and handling of small motor boats.		
069 Music 1974	Introduces various instruments, how to read notes, music appreciation, conducting, composing, and careers in music.	3. (a) 3. (b)	5. Describe four different careers in music and the preparation required for each.
070 Nature 1973	Introduces identification, life cycles, and importance of plants, animals, soil and rocks.		5. Describe three careers which involve nature study, and name two famous naturalists.
071 Oceanography 1965	Introduces marine monitoring, marine topography, waves, beaches, the ocean's affect on climate and weather, and the importance of oceans to people.	1. 8. (c)	
072 Orienteering 1974	Demonstrates effective use of topographic maps.		
073 Painting 1973	Demonstrates use, care, and storage of paint and painting tools. Includes a section on house painting as a career.		6. Interview a professional painter. Be sure to ask about special equipment for special jobs.

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MERIT BADGE PAMPHLETS

CAREER EDUCATION CONTENT

CODE # TITLE REVISION DATE	CONTENT SUMMARY (Career education emphasis underlined)	RELEVANT REQUIREMENTS	
		Existing	Sample Additions
074 Personal Fitness 1968	Presents a health care program and a fitness test.		
075 Personal Management 1972	Demonstrates planning and following a budget, establishment and use of credit, family buying, and contains a section on related careers.	7.	
076 Pets 1969	Discusses care, training, breeding, and showing of pets.		
077 Photography 1971	Demonstrates how to make a camera, and how to expose and process film. Terms used in photography are introduced and there is a section on industrial photography.	6.	
078 Pigeon Raising 1958	Demonstrates identification and care of pigeons.		
079 Pioneering 1967	Demonstrates knots, lashings, splices, rope making, and other pioneering techniques.		
080 Plant Science 1975	Introduces soil preparation; plant propagation; insects, diseases and weeds; general crop regions and careers in crop production.	7.	

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MERIT BADGE PAMPHLETS

CAREER EDUCATION CONTENT

CODE # TITLE REVISION DATE	CONTENT SUMMARY (Career education emphasis underlined)	RELEVANT REQUIREMENTS	
		Existing	Sample Additions
081 Plumbing 1965	Demonstrates use of plumbing tools, safety regulations, soldering, plumbing systems, cutting and threading pipe, and household plumbing skills.		9. Find out about careers in plumbing and how one prepares for them.
082 Pottery 1969	Demonstrates potting and the terms and tools used in potting. Discusses pottery of many lands, and presents career opportunities to work in clay.	6.	
083 Printing 1965	Demonstrates the use of letter, silk screen, and offset presses.		4. Visit a professional printing company in your town. Find out what equipment is used, what jobs are available in printing and how one trains for them.
084 Public Health 1969	Discusses diseases and their prevention, immunization, pasturization of milk, food sanitation, waste disposal, medical screening, pollution, the role of the Health Department, and careers in public health services.		10. Describe the jobs of three people in the public health field.
085 Public Speaking 1969	Introduces different kinds of public speaking, parliamentary procedures, speech preparation and presentation.		
086 Pulp and Paper 1974	Discusses what paper is used for and how it is made, the history of and careers in paper production.	8.	
087 Rabbit Raising 1974	Demonstrates rabbit marketing, raising, and record keeping techniques.		

MERIT BADGE PAMPHLETS
CAREER EDUCATION CONTENT

CODE # TITLE REVISION DATE	CONTENT SUMMARY (Career education emphasis underlined)	RELEVANT REQUIREMENTS	
		Existing	Sample Additions
088 Radio 1965	Demonstrates how to design, build, and operate a radio. Discusses jobs that exist in radio and related fields.	7.	
089 Railroading 1973	Demonstrates design and construction of model trains. Discusses railroad companies and related careers.	3.	
090 Reading 1974	Discusses novels, magazines, and other literature.		
091 Reptile Study 1972	Demonstrates reptile identification, observation, care of reptiles as pets, and superstitions about reptiles.		11. Describe what a herpetologist does.
092 Rifle and Shotgun Shooting 1967	Demonstrates safety, maintenance, and use of rifles and shotguns. Discusses individual skill development.		
093 Rowing 1964	Demonstrates care and operation of various types of boats.		
094 Safety 1971	Discusses personal safety, safety in the home, safety in public places, and accident prevention.	7. (b)	

MERIT BADGE PAMPHLETS

CAREER EDUCATION CONTENT

CODE # TITLE REVISION DATE	CONTENT SUMMARY (Career education emphasis underlined)	RELEVANT REQUIREMENTS	
		Existing	Sample Additions
095 Salesmanship 1971	Discusses sales skills, retail and wholesale sales, and jobs in sales.	1. 3. 5. 6. 8.	
096 Scholarship 1970	Discusses scholarship, leadership, and citizenship; and "How school training will be of value to me in the future."	2. (b)	
097 Sculpture 1969	Introduces sculpting, carving, and making a plaster model.		3. Name a famous sculptor and describe that artist's career.
098 Signaling 1974	Demonstrates how to build a signaling device for Morse code, to send and receive messages.		6. Describe several jobs in which signaling is used.
099 Skating 1973	Discusses skating safety and skill.		2. (optional) Describe career opportunities in skating.
100 Skiing 1965	Demonstrates skiing safety, techniques, equipment, and associations.		4. (add) Describe two jobs which involve skiing.
101 Small Boat Sailing 1965	Demonstrates sailing skills and safety. Discusses the care of equipment, various boats, and the history of sailing.		

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MERIT BADGE PAMPHLETS

CAREER EDUCATION CONTENT

CODE # TITLE REVISION DATE	CONTENT SUMMARY (Career education emphasis underlined)	RELEVANT REQUIREMENTS	
		Existing	Sample Additions
102 Soil and Water Conservation 1968	Discusses the importance of soil, water, pollution, and conservation. Erosion, water sheds and people's effect on the ecosystem is also discussed.		8. Name and describe the duties of three people who work in soil and water conservation.
103 Space Exploration 1976	Presents the history of space travel, the law of flight, benefits of space exploration, and careers in space.		7. (add) Or write to NASA for information about careers in space during the next 15 years and how to prepare for them.
104 Sports 1972	Presents rules of various sports, discusses etiquette, and encourages participation.		
105 Stamp Collecting 1974	Demonstrates collection, classification, and exhibition of stamps. Discusses the U.S. postal system and terms used by stamp collectors.		
106 Surveying 1960	Introduces surveying, mapping, and leveling.		6. (add)... of surveying, and think of two jobs in which surveying is used.
107 Swimming 1960	Discusses swimming and diving safety and skills.		
108 Textile 1972	Discusses use, creation, and dying of various types of textiles. Also discusses job opportunities in textiles.	6.	

MERIT BADGE PAMPHLETS

CAREER EDUCATION CONTENT

CODE # TITLE REVISION DATE	CONTENT SUMMARY (Career education emphasis underlined)	RELEVANT REQUIREMENTS	
		Existing	Sample Additions
109 Theater 1968	Introduces lighting, acting, writing and other employment opportunities in theater.		7. Describe four jobs in theater besides acting and explain how one prepares for them.
110 Traffic Safety 1975	Discusses costs of accidents, vehicle safety, related state and local programs, traffic signs, stopping distance, citizen responsibility, and safety regulations.		
111 Truck Transportation 1973	Discusses the importance of trucking and the role of truck companies. Describes operations, truck safety, trucking jargon, and includes a section on job opportunities.	1. 5. 6. 7.	
112 Veterinary Science 1973	Discusses life cycles of parasites, animal health and diseases, what veterinarians do and job opportunities in the field.	9.	
113 Water Skiing 1969	Demonstrates skiing safety and individual skill development.		
114 Weather 1963	Introduces identification of cloud formations, reading weather maps, and using related instruments. Also discusses the significance of weather.	2. (a)	6. Describe three jobs in meteorology and explain how one trains for them.
115 Wilderness Survival 1974	Discusses crucial equipment, food, shelter, and clothing. Discusses what to do when lost, how to find water and build a fire.		

MERIT BADGE PAMPHLETS

CAREER EDUCATION CONTENT

CODE # TITLE REVISION DATE	CONTENT SUMMARY (Career education emphasis underlined)	RELEVANT REQUIREMENTS	
		Existing	Sample Additions
116 Wood Carving 1966	Demonstrates how to carve and how to care for carving tools.		
117 Wood Work 1970	Demonstrates how to work with and care for wood and tools. Discusses career opportunities in woodwork.		
Energy	(Pamphlet not published to date; requirements analyzed from Scout Handbook.)		9. Find out about three people who are involved in energy production, conservation, or safeguarding, and explain what their jobs are and what they do.

IV. MERIT BADGE PAMPHLETS (cont.)

SECTION B: This section of the report lists the career education goals and objectives identified in the merit badge pamphlets.

The code number in the right hand margin refers to the merit badge (or badges) in which the goal or objective occurs. (See SECTION A, Column One, pp. 11-27 of this report, for the key.)

The goals and objectives are also keyed into the fifteen career clusters used by the Office of Career Education of the U.S. Office of Education. The code number in the left hand margin refers to the appropriate career clusters, as follows:

Code Number	Cluster Title
1	Agriculture and Natural Resources Management
2	Business
3	Communications
4	Construction
5	Homemaking
6	Environment
7	Fine Arts and Humanities
8	Health
9	Recreation
10	Manufacturing
11	Marketing
12	Marine Science
13	Personal Services
14	Public Services
15	Transportation

It should be noted that no goals or objectives were found in the Homemaking or Personal Services clusters.

*See the Appendix for a sampling of jobs in each cluster.

In addition to the goals and objectives in the cluster areas, the pamphlets contain four other goals and objectives of more general career education relevance:

1. Prepare an autobiographical resumé that you would use in applying for a job. (025)

2. Look ahead at possible career opportunities and tell what would be the steps in preparing for one of them. (075)

3. Appreciate the importance of your education in your future career. (096)

4. Write how your education today will be of value in your career of tomorrow. (096)

SECTION B

MERIT BADGE PAMPHLETS

CAREER EDUCATION

GOALS AND OBJECTIVES

Career Education Goals/Objectives

Cluster		Merit Badge Pamphlet
2	Run a small business for three months.	002
2	Write how to set up your own small business.	002
1	Tell some things that you can do to prepare for a career in livestock production.	004
1	Tell about careers in livestock production.	004
1	Recognize the value of careers in livestock production.	004
1	Submit a sketch showing the principal wholesale and retail cuts of beef. Tell about the USDA dual grading system of beef. Tell about the grades in each system.	004
1	Sketch a corral plan with cutting and loading chutes for handling 50 or more beef cows and their calves at one time.	004
1	Tell how cattle are handled, fed, weighed, and shipped.	004
1	Sketch a plan of a feed lot, hay and grain storage facilities, and loading chute for 30 or more fattening steers.	004
1	Make a sketch showing the principal wholesale and retail cuts of pork. Tell about the recommended USDA grades of pork. Tell the basis for each grade.	004
1	Outline in writing the proper feeding from the breeding of gilt or sow through the weaning of the litter. Discuss the growth and finishing periods.	004
1	Visit a farm where hog production is a major project, or visit a packing plant or stockyard handling hogs. Describe your visit.	004
1	Make a sketch of a useful saddle-horse barn and exercise yard.	004
1	Keep management records on a brood of 20 chicks (sexed or straight run) for 5 months. Record feed consumption, medication, mortality, and vaccination. Present the records for review.	004
1	Visit a farm or ranch where sheep are raised. Tell about your visit, including the feeding program used.	004
1	Describe some differences between the production of native lambs and the production of range lambs.	

1,2	Manage an egg-producing flock for 5 months. Keep records of feed purchased, eggs sold, and mortality. Present records for review. Tell about the grading of eggs.	004
1	Visit a horse farm. Describe your visit.	004
1,2	Raise 20 chicks, poults, or ducklings. Keep records of feed intake and weight gains. Present records for review. Kill and dress two birds. Tell about grades of poultry.	004
1	Recognize the importance of liking outdoor work and finding satisfaction in making things grow to a career in livestock production.	004-43
1,8	List the principal diseases in your area that afflict the animals in each classification. Describe the symptoms and explain the proper treatment for the diseases you list.	004-24-33
4	Describe the process an architect follows in developing plans for a house.	006-32-41
4	Describe the arrangements of a building you admire. Tell the function for which the building was designed.	006-15-27
4	Draw a floor plan of a building.	006-30-31
4	Sketch a building you admire.	006-29
7	Discuss job opportunities in art.	007-41
11	Promote a product or an idea with a picture or pictures.	007
4,7	Design something useful.	007
7	Name different career opportunities in astronomy.	008-78
7	Explain what you can do to prepare for careers in astronomy.	008-78
1	Tell what careers exist in atomic energy.	010-58-62
1	Tell what fields are related to careers in atomic energy.	010-58-62
1	Tell the meaning of the following: alpha particle, atom, background radiation, beta particle, curie, fallout, half-life, ionization, isotope, neutron activation, nuclear reactor, particle accelerator, radiation, radioactivity, roentgen, and X ray.	010

1	Make a drawing showing how nuclear fission happens. Label all details. Draw a second picture showing how a chain reaction could be started. Also show how it could be stopped. Show what is meant by a "critical mass."	010
1	Tell who five of the following people were; explain what each of the five discovered in the field of atomic energy: Henri Becquerel, Niels Bohr, Marie Curie, Albert Einstein, Enrico Fermi, Otto Hahn, Ernest Lawrence, Lise Meitner, William Rontgen, and Sir Ernest Rutherford. Explain how any one person's discovery was related to one other person's work.	010
1	Build a model of a reactor. Show the fuel, the control rods, the shielding, the moderator, and any cooling material. Explain how a reactor could be used to change nuclear energy into electrical energy or make things radioactive.	010
1	Make three-dimensional models of the atoms of the three isotopes of hydrogen. Show neutrons, protons, and electrons. Use these models to explain the difference between atomic weight and number.	010
15	Describe the working conditions and job qualifications for one job in aviation.	011-81-83
15	Tell what skills are needed for jobs in aviation.	011-81-83
15	List job opportunities in aviation.	011-81-83
15	Identify the following aircraft instruments and explain the purposes of each: altimeter, airspeed indicator, compass, turn and bank indicator, oil pressure and temperature gauges.	011
15	Point out on a model plane the forces which act on an airplane in flight.	011
15	List at least ten uses of aircraft.	011
1	Write in not more than 200 words how and why the honeybee is used in pollinating farm crops.	013
1	Hive a swarm or divide at least one colony. Explain how a hive is made.	013
1,6,9	Visit a bird refuge. Describe its purpose. Describe the management techniques.	014
10	Write an article of at least 200 words on bookbinding as a career.	015-21-23

10	Describe the two main sewing methods of binding books by hand. Tell when each should be used. Rebind a book, bind four or more issues of a magazine together.	015
1	List possible vocations related to botany.	016-54-59
1	Tell what training is necessary for a job in chemurgy, botany and agriculture, bacteriology and forestry.	016
1	Visit a county agent to find out how chemistry is meeting farm problems of soil fertility and crop pests.	020
10	Visit a laboratory or place of business that uses chemicals and find out how and why the chemicals are used.	020
10	Visit an industrial plant that makes chemical products or uses chemical processes and describe the processes used. What, if any, pollutants are produced and how are they handled?	020
	Explain what training is needed for careers in chemical fields.	020-45-47
	Describe two different kinds of work done by chemists, by chemical engineers, and by chemical technicians.	020-42-45
14	Describe one job in your community that is a form of public service. Tell what qualifications you need for the job.	021-39-40
	Prepare an autobiographical resume that you would use in applying for a job.	025
11	Pick an item or product. It may be real or imagined. Build a sales plan based on its good points and try to sell your counsellor on buying it from you.	025
3	Check careers in the field of communication.	025-28
2	Tell the meaning and use of the following:	026

a. business data processing
b. information retrieval
c. simulation
d. scientific processing
e. floating point
f. truncation
g. fixed point
h. accuracy
i. input
j. record
k. output
l. file
m. software
n. instruction
o. hardware
p. indexing
q. loop
r. subroutine
s. real time
t. time sharing
u. cybernetics

2	Visit a computer installation. Study how it works.	026
2	Tell the meaning of the following: a. memory b. bits c. on-line d. bytes e. microsecond f. address g. channel h. interrupt i. register j. console k. central processing unit	026
2	Name four input/output devices for computers. Explain their uses in a system. Explain the Dollerith code. Show how your name and address would be punched on a card.	026
2	Prepare flowcharts to work out a simple arithmetic problem. Explain to your counselor how this program could be stored in a computer. Tell how it could be used again.	026
2	Prepare flowcharts to find out the average attendance and dues paid at the last five troop meetings.	026
2	Describe the differences between analog and digital computers. Tell the use of each. Explain the differences between special and general purpose machines.	026
2	List four different uses of computers.	026
2	Explain what each of the following computer related jobs do: a. design engineer b. customer engineer c. programmer d. analyst e. operator f. salesman	026-59-61
1	Tell about the pasteurization of milk.	030
1	Tell about what a dairy manager does.	030-43-96
8	Borrow X-ray films. Study the tooth structure. Look for decay. Then: a. Use the X-ray films as a guide to draw a lower molar. Label its parts and surfaces. Show surrounding structures such as bone and gum tissues. b. Show on your drawing where the nerves and blood vessels enter the tooth. c. Show on your drawing where bacterial plaque is most likely to be found.	031

8	Tell or write about dental decay and gum disease and what causes these. Tell what each of the following does: bacterial plaque, sugars, and acid.	031
8	Arrange for a visit with a dentist. Before going, ask if you can be given a dental examination and a plaque control demonstration. Afterward, ask questions about things you want to know. Then write a report on what the dentist does in a checkup examination.	031
8	Name at least five instruments a dentist uses. On separate sheets of paper, draw them, label them, and explain how they are used.	031
8	With the help of a dentist, prepare a dental plaster cast using a vibrator, mixing bowl, water measure, plastic measure, model plaster, spatula, and rubber mold.	
8	Explain what different specialists do in the field of tooth care.	031-30-32
8	List some of the different dentist specialty fields.	031-30-32
8	Tell what training you need to be a veterinarian.	032-55
8	Tell what veterinarians do.	032-55
4	Tell what type of background to acquire to go into drafting as a career.	033-30
4	Reduce or enlarge a drawing you made. Show the scale used.	033
4	Show drawings you made of orthographic projections. Show an isometric drawing.	033
4	Make a rough sketch of a room. From it make a finished, scale floor plan. The drawing is to be properly titled. Show by conventional symbols all openings, equipment, and safety devices. List drawing instruments used.	033
4	Make one of the following: (1) A simple bar chart or graph showing your progress in scholarship, physical fitness, or financial activity. (2) A simple schematic drawing of a radio or electronic circuit. (3) A perspective drawing of your own house. Use proper proportion. Show shrubs and trees.	033
4	Make a scale drawing of some piece of craftwork. It must be so clear it can be used by someone else to make the article. The drawing is to have a bill of material. There is to be an estimate of cost.	033

4	Explain what overloading an electric circuit means.	034
4,10	Tell what different kinds of experiences will prepare you for a career in electricity.	034-44-48
4,10	Discuss the different job areas in the field of electronics.	035-52-53
4,10	Show how to read a schematic diagram.	035
4,10	Draw a simple circuit. It should include parts such as resistors, capacitors, transistors, or tubes. Use correct symbols. Label all the parts and tell what their uses are.	035
4,10	Explain how to avoid heat damage to parts.	035
4,10	Wire a circuit.	035
4	With the aid of a drawing explain and figure how much it would cost to pump 100,000 gallons of water from sea level into a reservoir whose surface is at 550 feet above sea level. Assume electric power costs 6 cents per kwhr and the combined pump and motor efficiency is 80 percent and 5 percent of the water is lost in leaks.	037
4	Set up a device for measuring heat transfer. Draw a graph showing heat transfer versus rate of flow. Explain why you get better heat transfer with a high rate of flow.	037
4	Show how to use one device for getting engineering measurements.	037
4	Pick a busy street or highway in your town. Study the traffic flow when heavy and light. Get from the city the predicted increase in automobiles and population over the next 5 years. Report on what you found. Include your plan of how the traffic situation in 5 years might be helped at the place studied.	037
4	Set up a distilling apparatus with and without a fractionating column. Draw a graph of product purity versus percent distilled. Explain why you get better results with a fractionating column.	037
4	Write a report explaining how energy in a fuel is changed into useful work in a machine. Use drawings to show what happens.	037

4	Show by a drawing how the forces are distributed in a king post truss bridge carrying a 200-pound person at the center if the two members are inclined 30 degrees above the horizontal.	037
4	Describe the kind of work done by an engineer. Tell how each branch of engineering helps our society.	037
10	Build a simple electrical or electronic device (kits may be used).	037
10	Design a cam, linkage, gear train, or other mechanical device for transforming motion. Prepare a working drawing. Build a working model from wood, plastic, or metal.	037
4	Tell what high school preparation is needed to get into an accredited engineering college.	037
4,10	Make an inspection trip to a manufacturing or processing plant or an engineering job in your town. Talk about what is happening with an engineer. Prepare a report telling about the trip. Emphasize things that use engineering.	037
	Make a slide rule. Show its use in solving problems. Explain the mathematical basis for the rule.	037
4,10	Tell what training is needed to prepare for a career in engineering.	037-11-13
6	Tell what careers exist in Environmental Science and explain the duties are.	038-59-63
6	With your counselor, plan and carry out a project in one of the following: a. The effect of water-holding capacity of soil on plant life. The relation of plant cover to runoff. How both are related to the water and oxygen cycles.	038
6	Write about your study in 500 words or more showing: a. How the climate, topography, and geology have influenced the number and kinds of plants and animals. b. How the living and nonliving elements are interrelated. c. Why it is important that people understand this.	038

6	With the help of your counselor, pick an area of 10 acres for study.	038
6	Visit the area four times for 2 hours each time. On each visit do the following: a. Record the temperature, rain, and wind. b. List the animals you saw. Tell what they were doing. c. List the plants you saw. Name the kinds of rocks and soil.	
6	Explain the meaning of the following: ecology, biosphere, ecosystem, plant succession, limiting factor. Give an example of the last two.	038
6	Make a report in the form of a short talk to a Scout group. Show you understand the following: a. The causes of water pollution. Tell what it does to rivers and lakes. b. The causes of land pollution. Tell what it does to the environment. c. The causes of air pollution. Tell what it does to the environment. d. How some chemicals get into the tissues of animals miles from where they were used.	038
6	Discuss the influence of land plant life on temperature, light intensity, wind velocity, and humidity; the influence of water plant life on the water environment; and how both land and water plants affect animal life.	038
1	On a tracing paper overlay, show the best way for getting from one center of the farmstead to another. Show how to get from the farmstead to the fields, pastures, and road. Explain your drawing.	039
1	Get plans for one building that would best fit into your farmstead. Tell how you would change the plans to fit your needs.	039
1	Make and explain a detailed plan for water and sanitation facilities for a farm.	039

1	On tracing paper overlay, show where you would relocate the main farmstead centers to best suit the needs of your kind of farm operation. Explain why you would relocate the centers.	039
1	Make a scale drawing of a farmstead site that has no buildings. This drawing should show present location of the following: trees (mark whether desirable or not), windbreaks, slope of land, roads, streams, ponds, direction of prevailing winds in winter and summer, high and low spots, electric lines.	039
1	On this plan show where you would put the farmstead centers to best suit the needs of your kind of farm operation. Explain why you would put the centers where you have.	039
1	Make a scale drawing of a farmstead as it is now. Show location of buildings. Name them and mark as permanent, temporary, obsolete, or movable. Show windbreaks, desirable trees, roads and farm lanes, electric lines, direction of prevailing winds in winter and summer, good and poor drainage spots, wells, ponds, streams.	039
1	Do the following on a tractor: grease, change oil and oil filter, clean air cleaner, flush cooling system, clean radiator fins.	040
1	With any farm machine, do a daily service check for field use. (Do things needed for best field performance.) Prepare any farm machine for winter.	040
1	Adjust farm equipment or machinery.	040
1	Pick a piece of farm machinery or equipment. Check all nuts, bolts, and screws. Tighten any that are loose. Replace those that are missing, worn, or damaged. List things you did.	
1	Repair broken or worn farm machinery or equipment.	040
1	Put a new handle in any tool found on the farm. Sharpen any cutting tool found on the farm. Build a tool rack and place to store nails, bolts, and washers.	040
1	Pick any farm machine and explain how power is transferred to do a job.	040
1	List tools usually found in a well-equipped farm shop. Explain the uses of four.	040
1	Recognize the need for initiative and sound character in farm management.	41-3
1	Recognize the importance of a career in crop production.	080-41

1	Discuss what skills, knowledge and attitudes are needed for a family farm.	041-1-7
1,2	Explain what records are needed in making out an income tax report.	041
1,2	Make out a sample of one year's birth record for 3 colts, 27 calves, and 15 pigs.	041
1,2	Keep a 7 day milk record for a herd of cows.	041
1,2	Make out a bill of sale for the following to Jones Produce Co., Chicago, Illinois: 160 lbs. of spring fryers - $.30 lb. 32 dozen eggs - $.42 per dozen 1 cockerel - $5.75 24 pullets - $2.50 each.	041
1,2	Keep chicken and egg production records for one month.	041
1,2	Explain what kind of records and books should be kept for a general purpose and stock farm.	041
14	Take the prints of one person. Have the prints and descriptions accepted for the civil identification file.	042
14	Give a short history of fingerprinting. Tell the difference between civil and criminal identification. Point out the purposes of each.	042
14	Show you can identify the eight types. Collect six of these.	042
14	Name the surfaces of the body where friction or papillary ridges are found. Explain why plain impressions must be taken on a card.	042
14	Take a clear set of prints. Use both rolled and plain impressions. Make these on an 8- by 8-inch Personal Identification fingerprint card (No. FD353).	042
14	Tell what a fire inspector does and what training is needed for the job.	043-54-55
6,9	Tell what fields lead to careers in fish and wildlife management.	045-34-35
6,9	Appreciate the need for a love of nature in career areas of wildlife management.	045-35

6,9	Work with your counselor on the following study. Study for 6 weeks the kinds of wildlife within several blocks of your home. List those good for your neighborhood. Also list those that are bad. Explain why you have put each on your lists. Suggest plans for increasing the good wildlife in your neighborhood. Tell what groups might help do this.	045
6	Organize and run a neighborhood campaign to clean up places that harbor rats or other harmful wildlife.	045
6,9	Plan and carry out a project that will improve a water or land area for fish or wildlife. Work with your counselor or a fish and wildlife manager.	045
1	Go out 2 days with a commercial fisherman. Describe his catch. Tell methods used. Write about the importance of such fish to the world's economy and health.	045

6,9	Visit a wildlife refuge or management area or managed fishing waters. Interview the resident manager. Write at least 500 words on what is being done to improve the area for fish and wildlife.	045
6,9	Tell which agencies are responsible for fish and wildlife management in your state. Tell the difference between their authorities and responsibilities. Describe opportunities for a career in one of these. Explain how hunting, fishing, and trapping laws are set in your state.	045
6,9	Describe the four methods used in fish and wildlife management to maintain or increase numbers. Give an example of each for your state.	045
6,12	Visit a game farm or fish hatchery. Interview the resident manager. Write a report of at least 500 words on the place of game farm birds and hatchery fish in conservation.	045
6	Working with your counselor or a forester, plan and carry out a forestry project that meets a need, such as tree planting, seed collecting, range improvement, recreational area improvement, or forest wildlife management.	047
6,9	Describe what the career of Forest Manager is.	047-25
1,6,9	Visit a managed public or private forest area or watershed with its supervisor and write a 500 word report on how the area is managed to grow repeated crops of lumber, to protect the watershed, to support repeated crops of wildlife, or to provide other services and benefits.	047
1	Take a field trip to a logging operation, or to a wood-using industrial plant, and write a 500 word report telling what new material is, where it comes from, how the finished products are used, and how waste materials are disposed of.	047
7	Tell what careers are available in science.	050-4-9
1	Describe the earth materials used in your home or a public building. Tell where they come from. List those which you use every day. Tell where they came from.	051
1	Prepare a report including maps or drawings of the geological features on or below the surface of an area that you know.	051

6	Describe how the soil where you live was formed. Tell the kinds of rock from which it came.	051
1	Visit a mine or quarry; oil or gas field; a gravel, clay, sand, or shell pit; or other like operation. Explain the deposit. Tell how the product is removed, transported, sold, and used. What safety precautions are used?	051
6	Get a topographic map of your home area. Study it. Explain the important geological features shown on it. (If you can't get a local map, study one of another place that you know. Air photos may be used instead of a topographic map).	051
6	Visit your water system. Describe the source, quality, and amount of water needed for your town.	051
6	Describe how a geologist serves society.	051-68-75
3	Write stories good enough for publication on any of the following. Show that you know the principles of good news or magazine writing: a. A news story b. A Scout story c. A sports story d. An editorial e. A feature f. A review of a play, movie, or television show.	057
3	Explain the following terms: font, pica, face, machine-set type, handset, galley proof, half-tone, electrotype, mat, copy, flush left, beat, copy desk, streamer, plagiarism, libel, and copyright.	057
3	Visit a newspaper or magazine office. After the visit, explain how a newspaper or magazine is prepared for publication. Explain the different departments and executives and what they do. Explain the importance of the deadline.	057
3	Prepare a dummy of a four-page newspaper or magazine. Include several different-size advertisements.	057
3	Show at least 15 of the proofreader's or copyreader's marks. Correct a proof or copyread a manuscript. Use as many of these marks as needed.	057

3	Take and show a picture to illustrate a story. Write a caption for the picture.	057
3	Write good heads for the three stories. Follow a standard head schedule but use different type style and size. Show face, type size, and count for each.	057
3	Prepare a script for a 50-minute radio or television newscast.	057
3	Describe what opportunities are available in journalism.	057-39-42
4	Make a drawing (1/8 inch equals 1 foot) of your homegrounds. Show all buildings such as the house, garage, and barn. (NOTE: If this is not possible, make a drawing of a friend's yard.) a. Make a plan for these grounds. Change walks, drives, walls, fences, and plantings as you wish. b. Show flow lines for drainage of surface water.	058
4	On a tracing of the drawing, prepare a planting plan. Have at least two kinds each of deciduous and evergreen trees and shrubs.	058
4	Name 10 shrubs, 10 trees, 5 ground covers, 5 perennials, and 5 annuals good for planting in your town. Describe their growth habits and soil and climate needs. a. Tell the difference between evergreen and deciduous plants. b. Describe the difference between broadleaf and coniferous evergreen plants. Name one of each. c. Tell the difference between perennials and annuals.	058
4	Visit a well-landscaped yard, park, or building. Describe how the landscape architect has helped it.	058
4	Show how to read topographic maps. Explain the importance of a good drainage plan.	058
4	Describe the work of the following: landscape architect, landscape contractor, nurseryman, and gardener.	058-7-9
7	Tell what a contract is. Must all contracts be in writing? Explain. Tell about several laws that have been passed to protect the consumer and the seller. Tell about several of the organizations that exist to help them.	059

7	Tell what civil law is. Tell what criminal law is. Tell the main differences between them. Give examples of each.	059
7	Ask five people (not more than one from your immediate family) about the role of law enforcement officers in our society. Discuss their answers with them. Go to a law enforcement officer in your neighborhood and ask about the responsibilities and duties. Discuss your findings.	059
7	Plan and conduct a mock trial with your troop or school class. After the trial is over, discuss it with the group.	059
7	Arrange a visit with a lawyer who works for a business, bank, title company, or government. Ask about and report on the duties and responsibilities involved.	059
7	Attend a session of a civil or criminal court. Write 500 words or more on what you saw.	059
7	Discuss the following: a. The Code of Hammurabi, the Justinian Code, and the Magna Carta. b. The development of the jury system. c. Two famous trials in history.	059
7,14	List fields related to law and law enforcement.	059-56-57
7	Describe how to become a lawyer or judge.	059-52-55
10	Do the following: a. Learn how to tan, cure, and finish leather. b. Tan or cure the skin of a small animal. c. Show proper care of leather goods. Make small repairs on something made of leather. d. Sole and heel a pair of shoes or boots. Keep a record of costs and time spent. e. Plain or braid an article of leather or leather substitute.	060

10	Tell what jobs there are in the leather industry, what qualifications are needed and what kind of working conditions exist.	060-47
10	Collect samples of five different kinds of leather. Tell the chief characteristics and best uses of each.	060
10	Make an article of leather which uses: a. Transfer of a pattern b. Cutting leather c. Decoration by one or more of the following: tooling, embossing, stamping, carving, or burning d. Punching holes e. Lacing.	060
10	Make a drawing showing how each of the following works: diesel engine, steam turbine, four cycle gasoline engine. Explain how the power in a shop or factory is transmitted to the machines.	062
10	Put together or build wooden or metal models of these: lever, inclined plane, screw, wedge, wheel and axle, block and tackle, and gears.	062
10	Make a metal object from a plan or blueprint. Use a machine lathe and a drill press.	062
10	Make a drawing showing how a drill press and metalworking lathe are made. Explain three operations that can be performed on each.	062
10	Visit a machine shop, trade school, or factory. Note the benchwork, power equipment, machine tools, and safety devices to protect workers. Describe your visit. If no such shop is available, make a chart or outline showing five mechanical occupations. List the work and training needed for each.	062
10	Explain the proper way to use the following hand tools: screwdriver, ball peen hammer, file, calipers, hacksaw, rule, combination square. Tell how to use these kinds of wrenches: open end, adjustable, monkey, pipe, box and socket. Show the use of any eight of the above tools.	062
10	List the training and skills needed for 5 machine work related areas.	062-49-62

4 Do the following: 064

a. Lay a stepping-stone or flagstone walk.

b. Plan and mold something ornamental in concrete.

c. Make major repairs in a masonry structure.

d. Build a useful dry masonry structure, such as an outdoor fireplace.

e. Plaster or stucco a wall or ceiling.

f. Visit a rock quarry or a factory where masonry material is made. Report on what happened from beginning to end.

4 Find out what jobs there are in masonry. Choose one in which you are interested. Report on the qualifications you must have for the job. Tell what the working conditions are. 064

4 Do the following: 064

a. Prepare or read correctly plans for a useful masonry structure such as a wall or outdoor fireplace.

b. Lay it out on the ground. Dig as needed for a foundation. Pour a foundation of solid concrete mixed yourself.

c. Prepare mortar correctly.

d. Build the structure. Use mason's tools correctly.

10 Pick a metal article commonly used around the home. Find out what metal or alloy is used in making it. Tell the main steps in making it. 065

10 Explain what a metal is. List from around your home examples of five different kinds of metals or their alloys. 065

10 Collect three rocks that contain a different recoverable metal in each. Show them. Tell how the metal in each might be recovered. 065

10 Pick three different industries which require metals and alloys having highly specialized properties. Tell how the properties of that metal made the industry possible. 065

10 Show three of the following mechanical properties of metals: strength, elasticity, ductility, hardness, malleability. Use a different metal for each demonstration. 065

10	Explain what is meant by corrosion and protective coatings. Put in a glass of strong salt water four pieces of steel, three of which have been protected from corrosion by: (1) galvanizing or coating with zinc, (2) painting, (3) tin plating. Put a scratch that cuts through the coating on each. After a few days write a brief report on what took place and why.	065
10	Compare the properties of common household materials such as plastics, porcelain, wood, and glass with the properties of metallic alloys like steel and brass.	065
10	Collect a sample of alloys from each of the following groups; tell what metals are part of each: carbon steel, stainless steel, cast iron, brass, solder, aluminum alloys, bronze, pewter. Describe the main properties of the alloys. Tell what property is most desirable for each.	065
10	Show strengthening of metals by cold working and heat treatment.	065
10	Name four different fields of Metallurgy. Describe what they include.	065-22-23
7	Name the four general groups of musical instruments. Tell how you get tones from one of each group.	069
7	Teach three songs to a group of people. Lead them in singing the songs. Use proper hand motions.	069
7	Compose and write the score for a piece of music of 12 measures or more.	069
7	Serve for 6 months as a member of a school, church, Scout unit, or other town musical organization; or take part as a soloist in public six times.	069
7	Sing or play a simple song or hymn picked by your counselor. Read all the signs and terms of the score. Use good technique, phrasing, tone, dynamics, and rhythm.	069
12	Visit an oceanographic research ship or an oceanographic institute. Write a 500 word report about your visit.	071
12	Give a 5-minute speech to your troop on "Jobs in Oceanography".	071
4,10	Describe the advantages, disadvantages and requirements of going into painting as a career.	073
4,10	Add colors to a white base paint to make two new paints of a predetermined color.	073

4,10	Prepare and paint the following: a. An outside surface. b. An inside surface. c. A piece of furniture. d. A concrete wall. e. A boat or canoe. f. A floor. g. A porch rail or fence. h. A lawnmower.	073
4,10	Explain the chief uses of oil, water, and rubber base paints. Tell the use of enamel, shellac, varnish, and lacquer. Tell how they can improve a surface.	073
4,10	Show the right way to use, clean, and store painting equipment.	073
3,7,11	Look ahead at possible career opportunities and tell what would be the steps in preparing for one of them.	075-30-31
3,7,11	Make planning cards and take 50 feet of movie film. Do the following: a. Edit your film so you have at least 25 feet of quality movies that tell a story. b. Show your edited film to your counselor.	077
3,7,11	Take 10 good black and white or color pictures. Do the following: a. Take from three to five of these pictures indoors with flash. b. Take at least 5 of the 10 pictures so they tell a story. c. Show your pictures to your counselor in an organized way.	077
3,7,11	Tell what industries provide opportunities in photography.	077-60
3,7,11	Explain how photographic film is processed. Tell how black and white prints are made.	077

3,7,11	Explain common photographic terms such as lens, shutter, viewfinder, camera angle, exposure, negative, transparency, f-number, and planning card.	077
1,6	Explain the nature and function of the soil. Tell about its texture, structure, need for water, air, organic matter, and the relationship of plants to the soil. Tell how the soil may be improved. Select one soil type from your area. Describe it in relation to the above.	080
1,6	Tell how to propagate plants by seeds, roots, cuttings, tubers, buds, and grafts.	080
1	Corn Option	080
	a. Grow a plot of corn. Record seed variety or experimental code number.	
	b. Have your plot inspected by your counselor. Tell about modern methods of commercial corn farming.	
	c. Tell about the contributions corn makes to today's food supply.	
1	Tell about one important insect pest and one important disease that damage each of the following: corn, small grains, cotton, and fruit trees. Collect and name five weeds that damage crops in your locality. Tell how to control these without harming people, wildlife, or useful insects.	080
1	List possible fields in crop production and what you would do to prepare for them.	080-41-43
1	Oil Crops Option	080
	a. Grow a plot of soybeans.	
	b. Have your plot inspected by your counselor.	
	c. Tell about modern methods of soybean growing on a commercial scale.	
	d. Tell of the contributions soybeans make to our food supply.	
1	Small Grains Option	080
	a. Give production figures for small-grain crops listed in the United States Statistical Report for the latest year available.	
	b. Help in harvesting a crop of grain. Tell how to reduce harvesting losses.	

c. Visit a grain elevator, flour mill, cereal plant, feed or seed company. Talk with the operator. Take notes. Describe the processes used.

1 Fruit and Nuts Option 080

a. Plant five fruit or nut trees, grapevines, or berry plants.

b. Take full care of fruit or nut trees, grapevines, or berry plants through one crop season.

c. Prune a tree, vine, or bush properly. Explain why pruning is necessary.

d. Demonstrate how a graft is made.

e. Describe how one fruit, nut, or berry crop is processed for use.

1 Forage Crops Option 080

a. Collect and mount for display three samples of each: perennial grasses, annual grasses, legumes, and broadleaf weeds. Label each grass and legume, indicating what use is made of it. Label each weed. Tell where each is most likely to be found.

b. Explain how legumes can be used to enrich the soil. Tell how they may deplete it under certain conditions. Do the same for grasses.

c. Describe five poisonous plants dangerous to livestock.

d. Tell the different ways for using forage crops as feed for livestock.

1 Cotton Option 080

a. Grow a plot of cotton.

b. Have your plot inspected by your counselor. Tell about modern methods of commercial cotton farming.

c. Tell about an insect that causes serious damage. Tell how it affects cotton production. Tell how it is controlled.

d. Tell how cotton is processed from the field to the finished product.

1	Describe how to prepare a seedbed for each of the crops in the options below. Submit a plan for planting an orchard crop. Describe the best type of site for such an orchard.	080
1	Make and use a germination seed tester to test 50 seeds of four of the following plants: corn, cotton, alfalfa, soybeans, clover, wheat, rice, rye, barley. Determine percent of live seeds.	080
4	Show how to use five important plumber's tools.	081
4	Make a drawing and explain the drainage system of the plumbing in a house. Show and explain the use of drains and vents.	081
4	Make a drawing and explain the way the hot and cold water supply system in your home or that of a neighbor works. Tell how you would make it safe from freezing.	081
4	Using a gas torch under supervision, solder three copper tube connections. Include one tee, two straight pieces, and one coupling.	081
4	Cut, thread, and connect two pieces of galvanized pipe.	081
4	Tell what kinds of pipe are most often used in a plumbing system. Tell why.	081
4	Identify and describe the use of each of the following: washer, cap, nut, float, force cup, half-and-half solder, flux, elbow, tee, nipple, coupling, plug, union, trap, drainpipe, water meter.	081
7	Explain the properties and ingredients of a good clay body for pottery.	082
7	Explain the meaning of the following pottery terms: bat, wedging, throwing, leather dry, bone dry, greenware, bisque, terra cotta, grog, slip, earthenware, stoneware, porcelain, pyrometric cone, glaze.	082
7	Do three of the following. Each is to be painted, glazed, or otherwise decorated by you: a. Make a flat tray or dish. b. Make a box, using the slab method. c. Make a vase or jar, using the coil method. d. Make four different tiles of your own design. e. Make a human or animal figurine or decorative design.	082

f. Throw a simple vase on a potter's wheel.

g. Make a pottery form. Help to fire it.

7	Make two drawings of pottery forms. These are to be on paper at least 8-1/2 by 11 inches. One must be a recognized pottery type. The other must be of your own design.	082
7	Visit a pottery, brickyard, ceramic plant, trade school or workshop; take notes on pottery processes; and describe your visit.	082-59
7	Tell what opportunities exist in ceramics in the United States, and what you would do to prepare for them.	082-59-61
7	Recognize the importance of the ceramics industry.	082-59
3,11	Using offset:	083
	Make a finished piece of publicity. The size is to be set by the equipment used. It can be a newspaper, poster, etc.	
3	Using letterpress:	083
	a. Set a paragraph by hand.	
	b. Read and mark proof correctly.	
	c. Set type from copy for display card or handbill.	
	d. Run 100 copies of the same job on a 10 by 15 or smaller job press. Show the correct way to ink, set gauge pins, use makeready, feed accurately, and wash up press.	
11	Using silk-screen:	083
	a. Make a stencil screen and base.	
	b. Print at least 50 copies of a poster, greeting card, or other material.	
8,14	Recognize the importance of proper public health care.	084-60-62
8,14	Identify careers in public health.	084-60-62

1	Describe six major jobs in the pulp and paper industry.	086-36-38
1	Visit a paper mill, pulp mill, container plant, box plant, or printer plant; describe the visit.	086-23-30
3	Check out jobs in radio. Talk about these with your counselor. Tell what job might interest you. Tell what training you need to prepare for it.	088-42-44
15	Name four departments of a railroad company. Describe what each does. Name and explain 10 jobs in railroading. Tell which job interests you the most and why.	089-39-50
11	List career opportunities in sales and report on what courses will help you prepare for them.	095-28-31
11	Interview a salesman to find out about his job.	095-22-23
	Write how your education today will be of value in your career of tomorrow.	096-56-63
	Appreciate the importance of your education in your future career.	096-58-63
7	Model in clay a plasteline or carve in wood, soft stone, soap, or other soft material the following: a. A full size human head. b. A small scale model of a group of animals or people in action.	097
7	Make a plaster mold of a fruit or vegetable; in this mold make a copy of the fruit or vegetable.	097
7	Recognize the value of space exploration.	103-58-59
7	Discuss possible careers in space exploration and what training you need for them.	103-58-60

7	Explain the meaning of each of the following. Give an example for each.	103

a. satellite

b. unmanned space probe

c. manned space mission

d. rocket engine

e. air breathing engine

f. remote sensing

g. telemetry

h. spin-off

i. rocket propellant (fuel/oxidizer)

j. closed environment

k. booster stage

l. payload

m. miniaturization

n. orbit

o. sounding rockets

p. burnout

q. weightlessness

r. trajectory

7	Discuss and demonstrate each of the following:	103

a. The Law of Action-Reaction

b. Apogee and perigee

c. How satellites stay in orbit

4	Find the height of a point that can be checked by raising or lowering a tape. Your answer must be within 5 percent of the taped measurement.	106
4	Use the beginning point as a bench mark with an assumed elevation of 100 feet to determine the height of four other points.	106

4	Without crossing a distance of 300 to 3,000 feet, find its length, then tape the distance. Your answer must be within 5 percent.	106
4	Find and mark the corners of a lot described as follows: From a beginning point go (1) south 83 degrees 30 minutes east, 78 feet. Then go (2) north 35 degrees 30 minutes east, 86 feet. Then go (3) north 64 degrees west, 47 feet. Next go (4) north 89 degrees 30 minutes west, 51.2 feet. Then go (5) south 22 degrees 30 minutes west, 88.9 feet to the beginning point. Your error of closure must not be more than 5 feet. From the corners, take compass readings of trees, shrubs, and rocks. Pace the distance.	106
4	From a point, measure by tape a range line north 330 feet and south 330 feet. Using the same point, measure a base line east 330 feet and west 330 feet. From one or more stations along the range or base line, take compass readings of trees, shrubs, and rocks. Pace the distance.	106
4	From field notes, draw a map to scale. Submit a neatly drawn copy.	106
10	Tell about job opportunities in textiles.	108-59-60
10	Visit a textile plant or textile school. Report on what you saw.	108
10	Explain the main steps in making a fiber into cloth. Name the machines used in each step. Tell what each machine does.	108
10	Describe four different ways of adding color to textiles.	108
10	Show one good way to test fibers for recognition.	108
10	Waterproof a piece of cloth.	
10	Weave a piece of cloth. Use a simple loom that you have made yourself.	108
10	Define 10 of the following terms: fiber, filament, yarn, turfint, nonwoven, tricot, plastic, Jacquard, full fashioned, Greige goods, bleaching, finishing, mercerization, screen printing, roller printing, durable press, sanforizing, preshrunk, water repellent, and fire retardant.	108
7	Design the setting for a play. Make a model of it.	109
7	Act a major part in a full-length play; or act a part in three one-act plays.	109

7	Design the costumes for five characters in one play set in a time before 1900.	109
7	Direct a play. Cast, rehearse, and stage it. The play must be 10 or more minutes long.	109
7	Show skill in stage makeup. Make up yourself or a friend as an old man or woman, an Indian, a clown, or a monster as directed.	109
7	Help with the building of scenery for one full-length or two one-act plays.	109
7	Do two short entertainment features that you could give either alone or with others for a troop meeting or campfire.	109
7	Write a one-act play. It must take 8 minutes or more to put on. It must have a main character, conflict, and a climax.	109
7	Design the lighting for a play; or handle the lighting for a play under guidance.	109
7	Explain the following: proscenium, central or arena staging, spotlight, floodlight, flies, highlight, low-light, scene paint, stage brace, cleat, stage crew, batten, foyer.	109
7	Do a pantomime that is picked by your counselor.	109
15	Know what a truck driver does.	111-15
15	Define the following terms: APU, bill of lading, common carrier, containerization, ETA, logbook, fifth wheel, OS&D, LTL.	111

15	Assume that you are going to ship by truck 100 pounds of things from your town to another. Explain in writing how you would handle this shipment from your town to a place 500 miles away. Tell when the things are needed. List what truck lines are used. Tell how the shipment is insured for damage. Tell when the shipment must be made if it is to arrive on time.	111
15	Do the following: a. List five jobs with trucking companies. Describe each. b. Talk with the safety director or driver supervisor about the requirements for becoming a professional truck driver.	111
2,15	Outline the general organization of a truck company. Describe what each department does.	111
2,15	Visit a truck terminal and do the following: a. Check the use of communications facilities. Tell what means are used, how a dispatcher controls over-the-road trucks, and how local trucks are controlled. b. Check with the maintenance department and tell how many miles engines run between overhauls, how to get better tire life, how breakdowns are prevented, what maintenance work is done by the company, and what work is done outside the company. c. Talk with a professional truck driver about safety. List five safe driving rules he follows.	111
8	Spend time with a veterinarian and report on what he does.	112-36
8	Tell about job opportunities for veterinarians.	112-37-39
8	Name five diseases of animals transmissible to humans.	112
8	Define bacterium, virus, and parasite. Tell how they cause diseases in animals. Name two diseases of farm animals or pets caused by each.	112
8	Show with drawings the stages of the life cycles of the tick, dog roundworm, and the lungworm of the pig.	112
8	Make a chart showing the normal body temperature, heart and respiration rates of the horse, cow, pig, sheep, dog and cat.	112
8	Tell about veterinary activities other than direct treatment and handling of animals.	112

8	Tell the normal posture or attitude, motion or action of three farm animals and two pet animals.	112
8	Prepare a program of animal health maintenance for two farm animals and one household pet. Emphasize adequate housing, feeding, watering, exercise, and grooming care, if required. Give the kinds of food each needs.	112
8	Make a schematic drawing of the following body systems; label the parts; and explain the function of each part: (a) respiratory; (b) digestive; (c) skeletal; (d) circulatory.	112
8	Tell the importance of proper nutrition in farm animals and pets.	112
6	(a) Make a drawing showing the water cycle. (b) Identify types of clouds. Tell the differences between them. (c) Tell the difference between drizzle, rain, freezing rain, sleet, hail, and snow.	114
	(b) Make a daily weather-chart for a month showing: (1) Dew or frost in the morning. (2) Wind direction, temperature, kinds of clouds, and precipitation at the same time each day. (c) On the chart, list the weather forecasts from radio or television at the same time each day. List how the weather really turned out. Count the times forecast and what really happened were the same.	114
6	Find out about the climate where you live. Tell how it influences business, farming, clothing, transportation, housing, and recreation.	114
6	Tell what meteorology is. Visit a weather station. Explain how observations are taken. Describe the following instruments: wind vane, anemometer, barometer, thermometer, hygrometer, rain gauge.	114
6	Read a weather map. Describe the meaning of the symbols used.	114
	(a) Draw a cross section of the atmosphere. Show its three main layers. (b) Describe hurricanes, tornadoes, cyclones, squall lines, and blizzards. Tell the differences between them. (c) Estimate the wind speed and direction by seeing how these affect trees, flags, etc.	114
10	Tell about job opportunities in woodwork.	117-59-61
10	Carry out a project in woodwork.	117

APPENDIX

THE FIFTEEN OCCUPATIONAL CLUSTERS OF THE U. S. OFFICE OF EDUCATION AND A SAMPLING OF JOBS IN EACH

The fifteen occupational clusters represent the entire world of work around which career education might be developed, as suggested by the United States Office of Education.

THE FIFTEEN OCCUPATIONAL CLUSTERS OF THE U. S. OFFICE OF EDUCATION AND A SAMPLING OF JOBS IN EACH

Agri-Business & Natural Resources

Cruiser (Forestry)
Hatchery Worker (Fishery)
Sanitary Engineer
Range Manger
Campground Caretaker
Fish & Game Warden
Forest Fire Guard
Dairy Tester
Nursery Worker
Produce Grower

Business & Office

Accountant
Computer Programmer
General Office Clerk
Typist
Office Manager
Stenographer
Bookkeeper
Receptionist
Stock Clerk
Estimator

Communications & Media

Communications Engineer
Sound Technician
Newspaper Reporter
Radio Operator
Air Traffic Control Specialist
Radio-TV Announcer
Offset Press Worker

Construction

Heavy Equipment Operator
Carpenter
Electrician
Bricklayer - Stonemason
Insulation Worker
Ironworker
Painter
Plumber - Pipe Fitter
Dry-wall Installer
Glazier

Health

Dental Hygienist
Optician
Hospital Administrator
Nurse - Licensed Practical
Psychiatric Aide
Surgical Technician
Orthopedic Cast Specialist
Nuclear Medical Technologist
Dietician
Sanitarian

Environment

Soil Conservationist
Industrial Waste Inspector
Water Treatment Plant Operator
Forest Fire Fighter
Air Control Specialist
Air Analyst
Smoke Tester
Industrial Health Engineer

Fine Arts and Humanities

Museum Technician
Journalist - Author
Librarian - Historian
Minister - Philosopher
Teacher
Urban Planner
Lawyer - Judge
Anthropologist
Piano Tuner
Musician - Artist

Homemaking and Consumer Education

Home Economist
Budget Consultant
Child Care Assistant
Salesperson (Textiles)
Salesperson (Children's toys)
Interior Decorator
Dressmaker - Tailor
Foster Parent
Food Service Representative
Home Service Representative

Hospitality & Recreation

Hunting & Fishing Guide
Playground Supervisor
Park Ranger
Hobby/Sport Shop-Employee/owner
Recreation Facility Attendant
Recreational Therapist
Host/Hostess - Restaurant
Travel Counselor
Sports Instructor
Community Center Director

Manufacturing

Machinist
Assembler
Manufacturer's Service Representative
Automated Equipment Engineer-Technician
Sheetmetal Worker
Research Mechanic
Tool & Die Maker
Machine Operator
Director, Quality Control
Marketing Researcher

Marine Science

Chemical Oceanographer
Marine Photographer
Marine Biologist
Oceanographic Engineer
Marine Meterologist
Diver's Helper
Ocean Floor Cartographer
Laboratory Assistant
Researcher
Fish Hatchery Superintendent

Marketing & Distribution

Buyer
Salesperson
Fashion Coordinator
Service Center Manager
Manager - Restaurant
Manager - Hotel
Warehouse Worker
Driver - Salesperson
Wholesaler

Personal Services

Make-up Specialist
Cosmetologist
Haircutter
Housekeeper - Home
Waiter/Waitress
Bell Captain
Hospital Attendant
Dry Cleaning & Laundry Worker
Reducing Salon Attendant
Embalmer

Public Services

Highway Patrol Officer
Bailiff
Fire Fighter
City Manager
Public Utility - Customer Service Representative
Mail Carrier
Meter Reader
Social Worker
Employment Interviewer
Building Inspector

Transportation

Traffic, Rate, & Transportation Clerks
Heavy-Truck Driver
Ticket Agent
Pilot, Engineer, Bus Driver, Ship Captain
Warehouse Traffic Director
Railway Express Agent
Crating & Moving Estimator
Port Traffic Manager
Automobile Mechanic
Schedule Analyst

CAREER SEMINAR RESOURCE PACKET

Bela H. Banathy
Dru Simms Robinson
Celia Chesluk
David Stein

PREPARED FOR SCOUTING/USA
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INSTRUCTIONAL AND TRAINING SYSTEMS PROGRAM
FAR WEST LABORATORY FOR EDUCATIONAL RESEARCH AND DEVELOPMENT
1855 FOLSOM STREET, SAN FRANCISCO, CALIFORNIA 94103

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NEED

Students need to be aware of career opportunities in their communities.

GOAL

To expose students to a variety of career opportunities and allow them to discuss these opportunities with professionals in various fields.

CAREER SEMINAR

An individual from the community makes a presentation to students interested in careers associated with the speaker's occupation. Any number of fields of interest may be covered by any number of speakers at a Career Seminar. A year's program may include several Career Seminars.

PROGRAM

The Explorer Career Seminar Program brings career interest Exploring to high schools by presenting, on school time, information about occupations to interested students. The career program is presented in an assembly or classroom setting by a specialist in his or her profession. Resource people have considerable expertise in the particular area selected and are contacted, recruited, and briefed well in advance. The resource person is given an outline which indicates basic facts that students need to know. The resource speaker will also be briefed on information specifically requested by school personnel. Primarily this helps to familiarize the resource people with the type of young people with whom they will be communicating, and gives them a start in organizing their presentations.

An opportunity is made available at the end of each program for young people to become members of the nearest special interest post of their choice, or to express interest in establishing a new one.

PARTICIPATING ORGANIZATIONS

Three groups combine resources to produce a Career Seminar program. They are: 1) Exploring BSA; 2) High School(s); and 3) community representatives. The primary role of Exploring BSA is to facilitate the linkage between community representatives and schools. High School personnel provide the facilities, school time, and interested students. Community representatives contribute time and information for the career presentation.

POTENTIAL BENEFITS

One major goal of the Career Seminar is to provide an opportunity for youth to broaden their career perspectives. However, the school, Scout and community participants benefit as well.

Some of the benefits of the Career Seminar Program include:

1. The Exploring program makes contact with potential members.
2. The Exploring program can act as a catalyst between the schools and the community.
3. Exploring executives and school personnel have the opportunity to establish working relationships with one another.
4. Students are helped to discover relationships between what they read in text books and what occurs in the real world.
5. School personnel are put in touch with workers in fields of interest to students.
6. School career education programs are enhanced through organizational efforts of the Exploring program.
7. Students receive first hand information from resource people in the students' interest area.
8. Community receives interest and attention from youth.

Activities involved in producing a Career Seminar may be divided into four phases. These phases are: GROUND WORK, BEFORE, DURING, and FOLLOW UP. Activities for the GROUND WORK phase include:

1. Select participating school.
2. Make formal inquiry to school personnel re:
   - willingness to participate;
   - availability of facilities;
   - insurance requirements.
3. Determine which careers will be presented at the Career Seminar.

There are many good ways to do this. Attitudes and levels of sophistication in the areas of Career Education and Exploring will vary from school to school. It is up to you to select or devise the manner most suited to your situation. Some examples are as follows:

a. Classroom Based Model

Individual teachers plan units and request, via the guidance department, resource people for specified times. Requests are made a minimum of 6 weeks in advance and are sent to the Exploring division which in turn honors those requests with confirmations. The individual classroom hears the resource person and is able through the counselor and teacher to arrange an on-site visit. This method allows considerable amount of faculty input.

b. Guidance Department Based Model

Career resource aide confers with the guidance department in determining the career interest areas as indicated by the career interest survey.

c. Departmental Based Model

Each department selects career interest areas to focus upon. Each department head is responsible for input from students and faculty.

d. Exploring Student Committee Based Model

The Exploring student committee and the dean of students decides upon the career speakers based on the career interest survey.

e. Career Interest Survey Based Model

The Scout Executive approaches school contact person (perhaps a guidance counselor, Career Center administrator or teacher who is interested in either Scouting or Career Education). Once feasibility and interest are established, the Career Survey is administered and, based on student response, the Scout Executive locates and interests community resource people to speak to students during a Career Seminar.

4. Match selected careers with an already existing post, or proceed to the list of activities for BEFORE the Career Seminar takes places.

Activities BEFORE the Career Seminar include:

1. Make contact with professionals in selected areas (this could be done through Rotary, Chamber of Commerce or individual contacts).
2. Ask company to provide volunteer participants for Career Seminar.
3. Brief participants (see Appendix A).
4. See that school schedules time and room for seminar, sets up class release procedures, hall passes, attendance check, etc.
5. See that school publicizes seminar (student paper, bulletin board, etc.) All publicity should indicate that the Career Seminar is being run in collaboration with Exploring, [illegible] and the ___(name)___ School District.
6. Invite counselors, advisors, and other school personnel with interest in Career Education to attend.
7. Send confirmation letters to school staff, to resource people and to others where appropriate. (See Appendix B.)

If student interest in the career area warrants a more in depth examination of the career, you need to consider establishment of an Explorer Post. In preparing for this possibility you should:

1. Ask if company is willing to sponsor an Explorer post. Explain what this involves.
2. Arrange a follow-up activity, a hands-on experience or field trip if appropriate.

FOLLOW-UP activities include:

1. Return speaker to his/her place of work.
2. School personnel, BSA personnel and students might evaluate seminar in a simple questionnaire. (See Appendix C)
3. Send written thank-you's where appropriate. (See Appendix B)
4. If a new post is to be organized after the Career Seminar, see the following publications for information:

   Post Action Ideas Book;

   Exploring Advisors' Guide;

   Exploring Techniques;

   and other Explorer/Leader Development Materials.
5. Carry out organizational Explorer Post meeting with interested students.

Additional Hints:

1. Don't make promises that cannot be fulfilled.
2. Exploring should not be "sold" at the seminar. The focus should be on the career.
3. The same seminar topic may be conducted in a second school on the same day.
4. If several careers are covered in a school year of seminars (or on a given day), students can select "x" number to attend so that each student has the opportunity to attend some.
5. Seminar can serve two functions:
    a) be purely a service to students;
    b) be a medium by which BSA identifies potential members.
6. The Career Seminar can serve as a recruiting means for BSA especially in schools where privacy laws prevent doing a career interest survey.
7. Career Seminars can serve as an alternative to Exploring's "First Nighter."

APPENDIX A

PACKAGE FOR RESOURCE PEOPLE

GUIDE FOR CAREER SEMINAR SPEAKER

You are about to play an important part in the career planning of young people. What should you say in order to be of the most help to them? Whatever you say will be accepted as an important source of information. Whatever you say will be a form of guidance.

Guidance is the attitude you present which will help the students

1. to understand themselves.
2. to make the most of their capacities, interests and other qualities.
3. to adjust themselves satisfactorily to the varied situations within the total environment.
4. to develop their ability to make wise decisions, and to solve problems independently.
5. to make their own unique contributions to society to the fullest possible extent.

HERE ARE SOME SUGGESTIONS FOR YOU AS A RESOURCE PERSON

DO

1. DO keep in mind the age, nature, and interest of the student to whom you are talking.
2. DO set an informal, comfortable tone for the program.
3. DO begin with general remarks on nature and relative importance of the job.
4. DO recognize that the job information you are giving is only one step in helping make a career choice.
5. DO be prepared with the job facts and current information - particularly local information.
6. DO be objective, honest, and realistic in describing your job - give facts or state opinions as such.
7. DO use films and other visual aids or devices if brief and pertinent.
8. DO give students a chance to participate - they learn by doing. After a 25-30 minute talk, allow 15 minutes or more for questions and answers.

DON'T

1. DON'T overload your material with detailed facts and figures.
2. DON'T oversell your job.
3. DON'T try to recruit.
4. DON'T deliberately discourage consideration of the field.
5. DON'T dwell on your personal biography and job success.
6. DON'T try to advise individual students on their personal qualifications. Only trained guidance counselors have the kind of expertise and personal data needed for counseling individual students.

CHECKLIST OF BASIC FACTS AND INFORMATION

A. About the Job:

1. General nature of the work and its importance.
2. Job Duties - typical work day, some individual operations on the job.
3. Equipment, tools or materials used.
4. Relation to other jobs - beginner jobs leading to this one, jobs to which one can be promoted, related jobs in other industries.
5. Earnings - beginning salary range, average salary after five years, hourly or weekly rates, fees.
6. Hours and working conditions - overtime, seasonality, day or night, vacation provisions, sick leave, and security provisions, work locations (inside, outside, hot, dusty, etc.), union representation.
7. Prestige and social values.
8. Advantages and disadvantages of the work.
9. Other facts.

B. About the Job Requirements:

1. Personal qualifications - sex, age, physical demands, special abilities and interests.
2. Training and education required - minimum level of schooling - where? cost? length? School courses that apply, special training on-the-job.
3. Licensing or other legal requirements, special tests or examinations.
4. Union or professional affiliations.
5. Other facts.

C. About Trends or Opportunities:

1. Total number in occupation - number young workers age 18.
2. Need for workers - under or over supply and explain.
3. Transfer and promotion opportunities to related fields.
4. Number of new entry each year.
5. Local opportunities - what does job mean in local terms?
6. Provision in occupation for women and minorities.
7. Types of local employment, pay rates, number of workers? Trends.
8. Other facts.

B. About further information:

1. Useful sources of detailed information.
2. Bibliography of references.
3. Available literature on job.
4. Local persons who might be willing to talk to students interested in field.
5. Other facts.

HERE ARE SOME QUESTIONS INTERESTED STUDENTS MIGHT ASK:

1. What does a person do in this job? What is a typical day's work? For example, what was the first thing you did when you came to work this morning? What did you do next? Other things that you do on this kind of job?

2. What parts of your job do you like best? What do other people in the occupation say they like about it?

3. What parts of your job do you like least? What do other people say they dislike? Why do people quit?

4. What are the absolute minimum qualifications for getting a beginner's job in this occupation? What other qualifications are necessary for advancement? What others are desirable?

5. What kind of training is necessary for this kind of job? Where are some of the better places to get it? How long does it take? How much does it cost?

6. What is the usual range of beginning salaries? What are the average earnings annually after five years? After ten?

7. What are the usual hours of work? Is overtime or night work required?

8. What are the working conditions like? Is the work done in surroundings which are comfortable or uncomfortable? Pleasant or unpleasant?

9. Is the job steady or seasonal? Is there danger of prolonged unemployment during economic depressions? Does the worker become more or less valuable as he grows older?

10. How did you get your job? How could we get one like it?

11. How can I get more information about this job? From printed material, trade journals, etc.? From what other qualified people?

Any questions you may have related to your program, should be directed to:

Exploring Executive: _____
The Local Scout Council, Exploring Division
Telephone:
Address:

APPENDIX B

SAMPLE FORMS

CONFIRMATION LETTER TO RESOURCE PEOPLE

Thank you for agreeing to participate in our Exploring Career Seminars. The enclosed information may be of some help in your presentation.

The program is scheduled at (High School's name and address) _____ on (date) _____ from (time) _____. When you arrive at the high school, contact (Guidance Counselor or Teacher) _____.

I am sure that your knowledge of the (career field) _____ field will be of great help to the students.

Thank you for your time and effort. If you have any questions, please call me (number of local Scout office) _____.

Sincerely,

(name)
Exploring Executive
(address)

Enclosure: (Items from Appendix A)

CONFIRMATION LETTER TO SCHOOL STAFF

Dear Counselor (or teacher, principal, Career Education Specialist, etc.):

This is to confirm our plans for producing a Career Seminar at _____High School. The Career Seminar will take place at _____room_____ from _____time_____ . The speaker(s) will present information on the following topic(s):_____,

_____, _____.

In order to publicize this event, please inform students of the date, time, place, and topic. In addition, students need to know the name of the person they should contact if they are interested in attending. All publicity should indicate that the Career Seminar is being produced in collaboration with Exploring/BSA and the _____ School District.

Sincerely,

Exploring Executive
Address
Telephone

THANK YOU LETTER TO SPEAKER

Thanks very much for the presentation you made. You gave the students a good idea of what your job entails and of the variety of career opportunities available in the field.

I am sure you put aside pressing and significant concerns to spend the morning (afternoon) with us, and we appreciate your time and help in responding to our request.

Sincerely,

Scout Executive

APPENDIX C

FEEDBACK

SCHOOL/SCOUTING PERSONNEL

Date _____

Company
Speaker
Career(s) Discussed:

Please answer the following questions:

1. What were some of the things students learned from this speaker?

2. What information about the career area was not covered to your satisfaction?

3. Did he/she use any audio-visual equipment or props?

4. Because of this presentation, do you think any of the students have new ideas about their future?

   Explain:

STUDENT FEEDBACK

Date _____

Company
Speaker
Career(s) Discussed:

Please answer the following questions:

1. What were some of the things you learned from this speaker?

2. What information about the career area was not covered to your satisfaction?

3. What did you like best about the presentation?

4. Because of this presentation, do you have new ideas about your future?
   Explain:

5. Would you be interested in exploring this career area further?

Activities that occur DURING the Career Seminar include:

1. As pre-arranged, either BSA person or school CE person will pick up the Career Seminar speaker(s), bring him/her to school and show them the room in which the seminar will take place.
2. If speaker is from an existing post, an Explorer of that post who is also a member of the school student body could speak to students at the seminar describing activities of the post.
3. A school guidance counselor may want to record participation in the seminar in students' cumulative files.
4. Announce arrangements (if any) for those interested in exploring other (related) career areas.
5. Ask students if they are interested in joining an Explorer Post in the career area. If response justifies establishment of a post, announce arrangements for follow-up activity.

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4) A Conversation with Steve Lavelle , Sequoia Council B.S.A., 1095 N Van Ness, Fresno, California 93728.